
INDIANA STATE TEACHERS' RETIREMENT FUND

**THE REPORT OF THE
ANNUAL ACTUARIAL VALUATION**

AS OF

JUNE 30, 2002

**Gabriel, Roeder, Smith & Company
Consultants and Actuaries**

January 27, 2003

The Board of Trustees
Indiana State Teachers' Retirement Fund
Indianapolis, Indiana

Dear Board Members:

Submitted in this report are the results of the June 30, 2002 actuarial valuation of the Indiana State Teachers' Retirement Fund.

The relevant member census data and the asset information for this valuation were furnished by your Executive Director and Staff. Their efforts and cooperation in furnishing these materials are acknowledged with our appreciation. We did not audit the information provided, but we did review it for reasonableness and compared it with the prior year's submission for consistency.

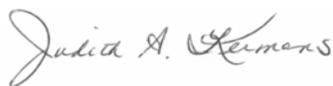
Since the last valuation, there have been no changes in the plan provisions (see Section E) and no changes in the actuarial assumptions (see Section H) used in this valuation. We are working on a study of Plan Experience for the plan years 1997 – 2002. Upon completion of this study, we will present a report of our findings to the Board, together with recommended changes in valuation assumptions and methods. In order to minimize the fluctuations in the value of the plan assets due to market volatility, we have used a smoothed market value of assets method, described in the Comments on page B-2 and shown on page B-6. This method was approved by the Board after consultation with the actuary.

Your attention is directed particularly to the Introduction Section on pages 1 through 4. Also of special interest are the Comments on pages B-1 through B-3.

The valuation was completed under the supervision of Members of the American Academy of Actuaries and was prepared using generally accepted actuarial principles and in accordance with standards of practice prescribed by the Actuarial Standards Board. To the best of our knowledge, this report is complete and accurate and the actuarial methods and assumptions produce results which are reasonable.

We welcome comments from the Board on the contents of this report.

Respectfully submitted,



Judith A. Kermans, EA, MAAA



Brian F. Dunn, ASA, EA, MAAA



Mark K. Johnson

MKJ:clb:lr

CONTENTS

Section	Pages	Items
		Cover Letter
		Introduction
	1-2	Summary of Key Valuation Results
	3	Population Projections
	4	Valuation Summary of Comments
A		Financial Principles
	1	Funding Objective
	1-2	Plan Structures and Funding Arrangements
	3	Actuarial Valuation Process
B		Valuation Results
	1-3	Comments
	4	Computed Employer Contribution Rates
	5	Comments Regarding Development of Assets and Liabilities
	6	Development of Funding Value of Assets
	7	Development of Assets and Liabilities
	8-9	Summary Statement of Fund Resources and Obligations
C		Historical Comparisons
	1-2	Computed Employer Contribution Rates
	3-4	Actuarial Accrued Liabilities and Percent Funded
	5	Unfunded Actuarial Accrued Liability
	6-7	Retired Members and Beneficiaries-Allowances and Liabilities
	8	Retired Members and Beneficiaries - Trend Graphs
	9	Active Members
	10	TRF Comparative Ratios
D		Population Projections
	1	Closed Group Actuarial Projections
	2-3	Closed Plan Active and Retired Member Projection
	4-5	New Plan Active and Retired Member Projection
E		Summary of Benefit Provisions
	1-2	Benefit Summary
	3	Changes in Benefit Purchasing Power
F		Details of Valuation Data
	1-7	Retired Member Data
	8-9	Inactive Member Data
	10-11	Active Member Data
G		Disclosures Required by Statements No. 25 and No. 27 of the Governmental Accounting Standards Board
	1	Supplementary Information
	2-3	Schedules of Funding Progress and Employer Contributions
	4	Statement of Changes in Plan Net Assets
	5	Statement of Plan Net Assets
H		Actuarial Assumptions, Methods and Definitions
	1-9	Summary of Assumptions Used in Actuarial Valuation
	10-11	Definitions of Technical Terms

INTRODUCTION

SUMMARY OF KEY VALUATION RESULTS
JUNE 30, 2002

	CLOSED PLAN	NEW PLAN	ISTRF TOTAL
Fund Members			
Retired Members and Beneficiaries			
Number	34,646	108	34,754
Annual Annuity and Pension Payments	\$ 480,689,995	\$ 1,662,264	\$ 482,352,259
Inactive Members			
Number - Vested	4,757	562	5,319
Number - Non Vested	11,314	17,529	28,843
Active Members			
Number	47,510	27,873	75,383
Annual Payroll	\$ 2,604,955,746	\$ 1,004,514,690	\$ 3,609,470,436
Accrued Liabilities - Annuities and Pensions			
Retired Members and Beneficiaries	\$ 4,411,727,837	\$ 17,338,655	\$ 4,429,066,492
Inactive Members	342,908,378	40,568,452	383,476,830
Active Members	8,743,141,816	1,108,976,098	9,852,117,914
Total	\$13,497,778,031	\$1,166,883,205	\$14,664,661,236
Funding Value of Assets	\$ 5,555,352,257	\$621,222,272	\$ 6,176,574,529
Market Value of Assets	\$ 5,147,174,967	\$575,578,213	\$ 5,722,753,180
Unfunded Actuarial Accrued Liability	\$ 7,942,425,774	\$545,660,933	\$ 8,488,086,707
Funded Ratios (Funding Value basis)			
Retired Member Annuity Liabilities	100.0%	100.0%	
Retired Member Pension Liabilities	57.6%	100.0%	
Retired Member Total Liabilities	63.5%	100.0%	
Active and Inactive Member Annuity Contributions	100.0%	100.0%	
Active and Inactive Member Pension Liabilities	0.0%	36.4%	
Active and Inactive Member Total Liabilities	30.3%	52.5%	
All Annuity and Pension Liabilities	41.2%	53.2%	
Computed Employer Contribution Rate for Fiscal Year 2003-2004*			
Normal Cost	7.39%	7.53%	
Unfunded Actuarial Accrued Liability	10.97%	1.97%	
Total	18.36%	9.50%	

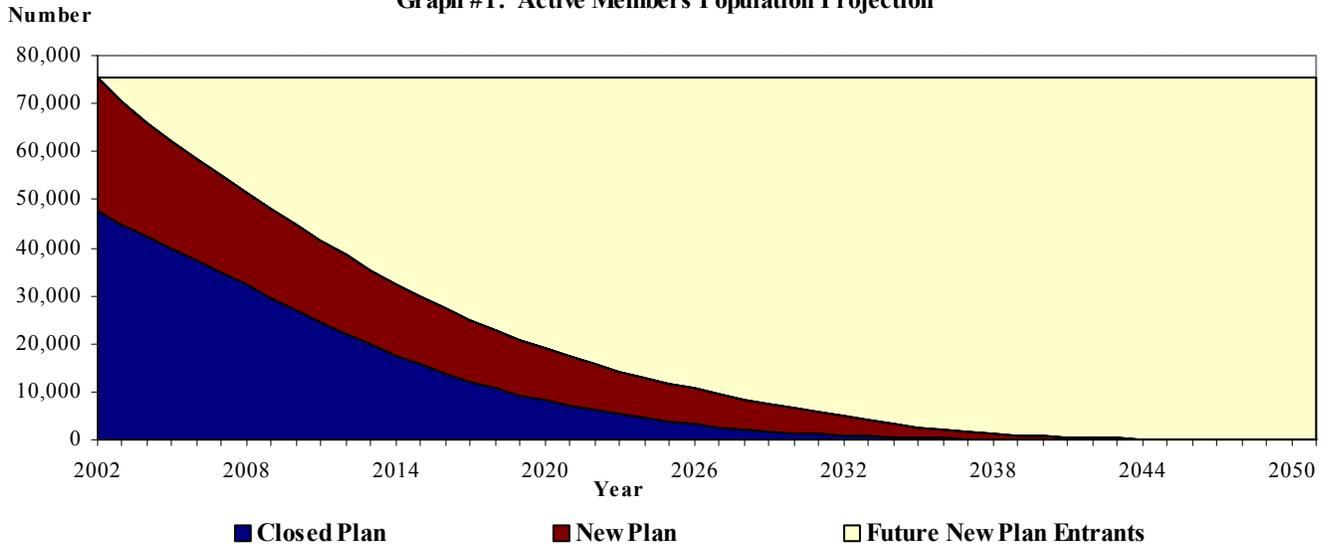
** For additional information on Contribution Rates see page B-4.*

SUMMARY OF KEY VALUATION RESULTS FOR PRIOR YEAR
JUNE 30, 2001

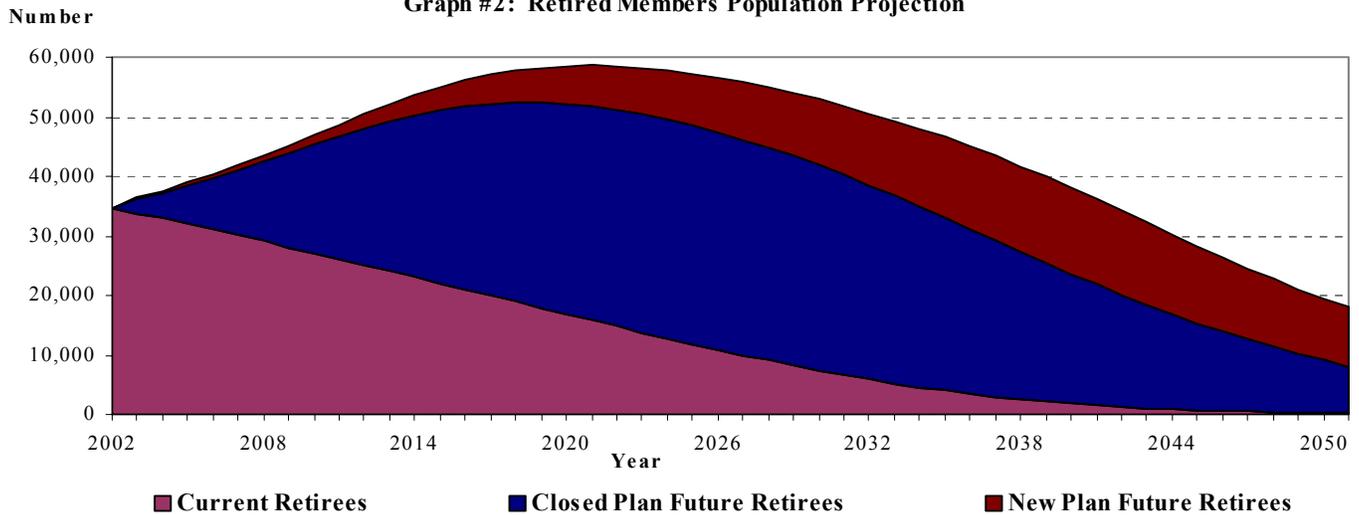
	CLOSED PLAN	NEW PLAN	ISTRF TOTAL
Fund Members			
Retired Members and Beneficiaries			
Number	33,698	85	33,783
Annual Annuity and Pension Payments	\$ 453,306,243	\$ 1,186,156	\$ 454,492,399
Inactive Members			
Number - Vested	4,358	237	4,595
Number - Non Vested	27,815	6,782	34,597
Active Members			
Number	50,802	24,846	75,648
Annual Payroll	\$ 2,564,451,154	\$754,425,873	\$ 3,318,877,027
Accrued Liabilities - Annuities and Pensions			
Retired Members and Beneficiaries	\$ 4,121,359,222	\$ 12,080,801	\$ 4,133,440,023
Inactive Members	311,102,377	17,387,687	328,490,064
Active Members	8,263,326,092	798,569,794	9,061,895,886
Total	\$12,695,787,691	\$828,038,282	\$13,523,825,973
Funding Value of Assets (Market Value)	\$ 5,363,497,813	\$447,261,751	\$5,810,759,564
Unfunded Accrued Liability	\$ 7,332,289,878	\$380,776,531	\$ 7,713,066,409
Funded Ratios			
Retired Member Annuity Liabilities	100.0%	100.0%	
Retired Member Pension Liabilities	59.3%	100.0%	
Retired Member Total Liabilities	65.4%	100.0%	
Active and Inactive Member Annuity Contributions	100.0%	100.0%	
Active and Inactive Member Pension Liabilities	0.0%	37.1%	
Active and Inactive Member Total Liabilities	31.1%	53.3%	
All Annuity and Pension Liabilities	42.2%	54.0%	
Computed Employer Contribution Rate for Fiscal Year 2002-2003			
Normal Cost	7.32%	7.46%	
Unfunded Accrued Liability	10.53%	1.86%	
Total	17.85%	9.32%	

POPULATION PROJECTIONS

Graph #1: Active Members Population Projection



Graph #2: Retired Members Population Projection



The graphs above show projections of the number of active members and retired members that are expected to be in those two categories in the future.

The projected active population levels are developed from year-to-year by the application of assumptions regarding pre-retirement withdrawal from service, retirements, deaths, disabilities and the addition of new members. The projection depicted in Graph #1 indicates that by 2012, half of the current active population will need to be replaced and that by 2040 the active membership will consist almost entirely of future hires. ***This projection assumes a constant active population level of 75,383 in the future.***

The projected retired population levels shown in Graph #2 are developed from the current retired population, the addition of new retired members from the active population, and mortality assumptions. The projection indicates that around 2021 the Closed Plan retired population will peak. Note that this graph does not include future retirements of active members that will be hired in the future. If it did, the graph would not be a “hill”, but would plateau around 2026. At this point the ratio of the number of retired members to active members would remain somewhat constant at approximately 1.25 to 1. For further details on these projections see Section D of this report.

VALUATION SUMMARY OF COMMENTS

- **Valuation Data.** This year we were able to use active and inactive member data from the new SIRIS database for the active and inactive member components of the valuation. Suitable SIRIS data was not yet available for the retired member and beneficiary component of the valuation. Legacy system data was used for that purpose.

- **New Asset Valuation Method.** With the Board's approval, we have introduced a new asset valuation method. It is a four-year smoothed market value method with a 20% corridor. This method of determining valuation assets will smooth out the effect of investment market volatility on the Unfunded Accrued Liability component of the Computed Contribution Rate (see pages B-2 and B-6 for further discussion of this method). This change reduced the computed contribution rate by 0.57% for the Closed Plan and by 0.17% for the New Plan. Also, the total Funding Ratio (the ratio of the Funding Value of Assets to the Actuarial Accrued Liability) increased from 38.1% to 41.2% in the Closed Plan and from 49.3% to 53.2% for the New Plan as a result of this change. Prior to this valuation, the Funding Value of Assets used for valuation purposes was equal to the Market Value.

- **Additional Disclosures.** In other Sections of this report, we point out that the level percent-of-payroll contribution rates that have been calculated for each Plan since the June 30, 1996 actuarial valuation do not adequately reflect the true nature of the two-plan structure of the Indiana State Teachers' Retirement Fund (ISTRF). (Please see pages A-2 and B-4). In order to provide more relevant information we have included two new features:
 1. For the Closed Plan we calculated expected pension disbursements for 2003-2004 of \$448 million. This amount represents the projected Closed Plan pay-as-you contribution amount for that period.
 2. For the New Plan we converted the Board approved 9.0% contribution rate to a \$101 million contribution amount for the same period.

Further comments on Plan funding and information regarding contribution can be found in Sections A and B of this report.

SECTION A

Financial Principles

FUNDING OBJECTIVE

The funding objective of ISTRF is to establish and receive contributions which, when invested at the assumed rate of return, will ultimately accumulate assets over each member's working lifetime that will be sufficient to pay expected retirement allowances.

PLAN STRUCTURES AND FUNDING ARRANGEMENTS

The Indiana State Teachers' Retirement Fund (ISTRF) is comprised of a two Plan structure in compliance with Indiana Code Section 21-6.1-2-2:

- The **Closed Plan** consists of those members who were hired prior to July 1, 1995, and who have maintained continuous employment with the same school corporation or covered institution since that date.
- The **New Plan** consists of those members who were:
 - (a) hired on or after July 1, 1995, or
 - (b) hired before July 1, 1995, served in a position covered by ISTRF, and, subsequent to June 30, 1995, were either hired by another school corporation or institution covered by ISTRF, or were rehired by a covered prior employer.

Characteristics of the Closed Plan:

1. Active membership in the Closed Plan continues to decline as members quit, become disabled, die, retire, or incur a change in status as described in (b) above, thereby automatically transferring to membership in the New Plan.
2. Closed Plan members are assumed to earn pay increases while they remain in active service. Therefore, based on the current actuarial assumptions, the Closed Plan payroll will continue to grow for the next 3 to 4 years (in spite of the steadily declining population described in Item # 1 above), and then decline over the next 20 to 50 years until there are no active members in the Closed Plan.
3. The pension benefits from the Closed Plan are funded by State appropriations (including short-term contributions of some revenue from the State Lottery). Annuity benefits payable from the Closed Plan are funded by the annuitization of Closed Plan member contributions at the time of retirement.

Characteristics of the New Plan:

1. As members depart from active service in the New Plan, their replacements will become members of the New Plan. If the New Plan were a stand-alone plan, this pattern of departures and hirings would produce a fairly constant population size. However, overall active membership in the New Plan is expected to increase over time due to the following factors:
 - (a) As Closed Plan members depart from active service, their replacements will become members of the New Plan; and
 - (b) The special provisions of Indiana Code Section 21-6.1-2-2 require that any member who changes jobs within the System or who is rehired within the System after a period of absence automatically becomes a New Plan member.
2. The result of an expanding membership in the New Plan is an accelerated growth in the New Plan payroll. The expanding New Plan population and payroll are not consistent with traditional level percent-of-payroll funding.
3. Pension benefits payable from the New Plan are funded by contributions from local school corporations or other institutions that employ covered members. Annuity benefits payable at retirement from the New Plan are funded by New Plan members.

Funding Arrangements

Prior to the legislation that established the two-plan structure in ISTRF, the pension benefits of the Indiana State Teachers' Retirement System were funded on a pay-as-you go system. Under this arrangement, amounts were appropriated to meet the current year's pension payment requirements. Pension benefits payable from the Closed Plan continue to be funded on this basis. In 1995, the Pension Stabilization Fund was set up for the Closed Plan. Since then, some pre-funding progress has been made via State appropriations to this Fund. Pension benefits payable from the New Plan are funded through percent-of-pay contributions. The Teachers' Retirement Board sets this contribution rate after reviewing the most recent actuarial valuation report. The current contribution rate of 9.0% was set by the Board in November, 2000 for the fiscal year 2001-2002. Under the direction of the State Legislature, the contribution rate will remain at this level for a period of at least five years (i.e., at least until the fiscal year 2006-2007).

THE ACTUARIAL VALUATION PROCESS

The actuarial valuation is the mathematical process by which the contribution rate is determined. The flow of activity constituting the valuation may be summarized as follows:

- A. **Covered Person Data**, furnished by the plan administrator
 - Retired members and beneficiaries now receiving benefits
 - Former employees with vested benefits not yet payable
 - Active employees
- B. + **Asset data** (cash and investments), furnished by the plan administrator
- C. + **Estimates of future experience (actuarial assumptions)**, which are established by the Board of Trustees after consulting with the actuary
- D. + **Funding method** for employer contributions (the long-term planned pattern for employer contributions)
- E. + **Mathematically combining the assumptions, the funding method, and the data**
- F. = Determination of:
 - Plan financial position*
 - and/or *New Employer Contribution Rate*

SECTION B

Valuation Results

COMMENTS

Contribution Rates

Level percent-of-pay contributions that have been separately reported for the Closed Plan and New Plan each year since the June 30, 1996 valuation do not reflect the differences between these Plans. These level percent of pay contribution rates assume a constant population size and payroll growth based on an underlying wage inflation rate of 5.5% when calculating the UAL component of the contribution rate. The calculations do provide a comparable basis on which the funding needs of these Plans can be considered. For this report, we have provided additional measures of contribution rates and amounts that reflect the funding differences in the two-plan structure of ISTRF. As such, a discussion of the changing demographic nature of the two Plans and how it relates to level-percent-of-payroll contributions is in order.

On one hand, the number of members in the Closed Plan will continue to decline through retirements, deaths, and other forms of termination. After a brief period of increases, the Closed Plan active member payroll will decrease to \$0 over the next 20 to 50 years. As this happens, attempts to calculate a meaningful level percent-of-payroll contribution rate for this group will be compromised by the ever-decreasing payroll and will break down completely when the payroll becomes \$0, after which the unfunded accrued liability amortization will need to be calculated as a level dollar amount that is not linked to payroll.

On the other hand, membership in the New Plan will not remain constant either. While departures from the active rolls of the New Plan will be replaced by New Plan members, departures from the Closed Plan will also be replaced by New Plan members. In addition, due to the special features of the Indiana Code that established the two-plan structure, members of the Closed Plan who either change jobs within the System or are rehired into a covered position after a period of absence will automatically become members of the New Plan. Eventually, the New Plan is expected to contain 75,383 active members, roughly three times the current population in the New Plan. Some of the growth will consist of Old Plan migration members with unfunded liability. The New Plan can be funded on a level percent-of-payroll basis in the long term. However, stability may not be reached for some time.

Prior to the establishment of the two-plan structure, the ISTRF actuary calculated a level percent-of-payroll contribution rate. This was a theoretically correct rate, though not used, since ISTRF was being funded on what is known as a pay-as-you go basis. After the change to a two-plan arrangement, the

COMMENTS (CONTINUED)

actuary calculated level percent-of-pay contribution rates separately for each of the two Plans. While the Closed Plan continues to be funded on a pay-as-you go basis, the Retirement Board adopts a funding rate for the New Plan that is based on the level percent-of-payroll rate. That rate is currently 9.0%.

To maintain consistency with prior practice, we have included the same level percent-of-payroll contribution rates in this report with the following added features:

- For the Closed Plan, we show the expected cash expenditure needed to pay retirement allowances for Closed Plan members in the fiscal year 2003-2004.
- For the New Plan, we converted the Board-adopted 9.0% funding rate to dollars based on the expected New Plan active payroll for the 2003-2004 fiscal year. We have not adjusted this payroll to anticipate “migration” from the Closed Plan to the New Plan and any replacement of mid-year departures from the Closed Plan.

Plan Provisions

There have been no changes in plan provisions since the last actuarial valuation. The ad hoc COLA effective January 1, 2003 pursuant to IC 5-10.2-5-32 has been taken into consideration for the purpose of calculating plan liabilities.

Plan Assumptions

There have been no changes in the primary actuarial assumptions since the last valuation. Some minor changes related to valuation software methods were made. The current set of actuarial assumptions and methods (except as noted below) used to value ISTRF benefits was adopted by the Board for the June 30, 1998 actuarial valuation. The assumptions were based on a Study of Experience covering the period from July 1, 1991 through June 30, 1996. We are currently preparing a Study of Experience for the period from July 1, 1997 through June 30, 2002. In addition to a review of the valuation assumptions, the Study will analyze the current methodologies used for the valuation in light of the changing demographic nature of the Closed and New Plans. We will present a report of our findings to the Board along with any recommended changes in assumptions, methods and procedures.

COMMENTS (CONTINUED)

Asset Valuation Method

With the Board's approval, we have introduced a new asset valuation method. It is a four-year smoothed market value method with a 20% corridor. This method of deriving valuation assets will smooth out the effect of investment market volatility on the Unfunded Accrued Liability component of the Computed Contribution Rate (see page B-6 for the numerical implementation of this method).

The new method operates as follows:

1. The previous year's Funding Value of Assets is assumed to earn the rate of return contained in the actuarial assumptions (currently 7.5%). In addition, non-investment related transactions (benefit payments and contributions) are charged or credited with a half-year's investment return (based on the assumption that, on average, they take place mid-year).
2. The net result of these calculations is the assumed dollar amount of investment return, which is available for immediate recognition. The difference between this assumed dollar amount and the dollars of the actual investment return on a market value basis is recognized in four equal installments over the current year and the three following years. The full amount of this difference is the asset gain or loss (on an actuarial basis) for the previous year. It is added to similar phased-in gains or losses from the previous three years to obtain the Total Recognized Investment Gain/(Loss).
3. The Preliminary Funding Value of Assets for the current year is the sum of:
 - a. The Funding Value of Assets as of the previous year, *plus*
 - b. The Non-Investment Cash Flow during the prior year, *plus*
 - c. The assumed dollar amount of investment return (fully recognized), *plus*
 - d. The total recognized investment gain or loss.
4. The Preliminary Funding Value of Assets is measured against two corridor values that surround the Market Value of Assets:
 - a. 120% of Market Value of Assets (maximum)
 - b. 80% of Market Value of Assets (minimum)

If the Preliminary Value exceeds Item a., such excess is not recognized and Item a. is the Funding Value of Assets for the current year. If the Preliminary Value is less than Item b., the shortfall is not recognized and Item b. is the Funding Value of Assets for the current year.

If the Preliminary Value lies between Item a. and Item b., it becomes the Funding Value of Assets for the year.

The corridor feature is included to keep the Funding Value of Assets reasonably "close" to the Market Value, while still attempting to smooth out investment market volatility.

COMPUTED EMPLOYER CONTRIBUTION RATES
JUNE 30, 2002

Contributions for	Employer Contributions As %s of Active Payroll For Fiscal Year 2003-2004	
	Closed Plan 37-Year Amortization of UAAL	New Plan 37-Year Amortization of UAAL
Normal Cost:		
Age and Service Pensions	7.03%	7.19%
Disability and Death-in-Service	0.36%	0.34%
Totals	7.39%	7.53%
Unfunded Actuarial Accrued Liability (UAAL):		
Retired Members and Beneficiaries	2.23%	0.00%
Active and Inactive Vested Members	8.74%	1.97%
Totals	10.97%	1.97%
Computed Employer Contribution Rates	18.36%	9.50%
\$ Contribution Based on Computed Rates	\$ 532,000,000	\$ 106,000,000
2003-2004 Expected Employer Contribution Amount Based on Budgeted Rates	\$ 448,000,000	\$ 101,000,000

COMMENTS REGARDING CONTRIBUTION RATES

- The Expected Employer Contribution Amount shown for the Closed Plan is the amount of pension benefits expected to be paid in the 2003-2004 fiscal year. This amount expressed as a percentage of valuation payroll is 17%.
- The Expected Employer Contribution Amount shown for the New Plan is the current Board-adopted rate of 9% of payroll multiplied by the projected valuation payroll.
- The UAAL contribution rates shown above were calculated as a level percentage of payroll assuming a constant population size for each Plan. This allows the contribution rates for the two Plans to be considered on comparable basis. The dollar contribution based on computed rates is a projection to the 2003-2004 fiscal year at the 5.5% payroll growth rate assumption and is provided for illustration. In reality, the Closed Plan is shrinking in size and the payroll will grow more slowly than 5.5%. The New Plan is growing as Closed Plan members terminate active employment and their replacements become New Plan members. The New Plan payroll will grow more rapidly than 5.5%. The UAAL contribution rate for the Closed Plan calculated as a level percentage of the declining Closed Plan payroll would be higher than is shown. Conversely, the UAAL contribution rate for the New Plan calculated as a level percentage of the increasing Closed Plan payroll would be somewhat lower than is shown.
- The existence of Unfunded Actuarial Accrued Liability in the New Plan is primarily attributable to members with prior service. Additional liabilities transferred from the Closed Plan as a result of prior service would likely require additional funding.

COMMENTS REGARDING DEVELOPMENT OF ASSETS AND LIABILITIES

ASSETS

- The Market Value of Active and Inactive Member Reserves of \$2,821,296,186 was allocated for valuation purposes between the Closed Plan and the New Plan based on the aggregate Annuity Savings Account values in the valuation data.
- The Market Value of Retired Member Reserves of \$567,445,661 was allocated for valuation purposes between the Closed Plan and the New Plan based on the calculated retired member Annuity liabilities that this reserve supports. Currently, the allocated Reserve exceeds the calculated Annuity liabilities in both plans on a Funding Value basis (but not on a Market Value basis). The excess is held as a contingency reserve against future experience.
- The Market Values of the Employer Reserve were used as reported.
- The Market Value of Assets as of June 30, 2002 was reported to be \$5,722,753,180. Using this figure, the *Funding Value of Assets* (which was implemented for the June 30, 2002 valuation) is \$6,176,574,529 (see page B-6). The difference between the Market Value of Assets and the Funding Value of Assets is the *Funding Value Adjustment*. This amount is allocated between the Closed Plan and the New Plan Reserves on a pro-rata basis based on the respective Market Value of Assets for those Reserves. The derivation of the Non-Investment Net Cash Flow used in the development of the Funding Value of Assets is shown below. Further details can be found on page G-4.

DEVELOPMENT OF NON-INVESTMENT NET CASH FLOW

Additions

Member Contributions	\$ 107,051,946
Employer Contributions	<u>571,082,604</u>
Total Contributions	\$ 678,134,550
Other Additions	<u>3,405,330</u>
Total Additions	\$ 681,539,880

Deductions

Benefit Payments	\$ 601,945,360
Other Deductions	<u>1,250,635</u>
Total Deductions	\$ 603,195,995

Non-Investment Net Cash Flow	\$ 78,343,885
-------------------------------------	----------------------

ACTUARIAL ACCRUED LIABILITY

- As of the valuation date, a negative Unfunded Actuarial Accrued Liability (UAAL) of \$318,158 exists for New Plan Fund retired members and beneficiaries. This is due to a temporary excess of assets over the calculated liabilities. This temporary excess does not affect the Total UAAL for the New Plan and will vary as members retire or die and transfers between active and retired employer reserves occur. In practice, one would never expect the UAAL to be exactly \$0, except where there is an assumed balancing transfer in the valuation.

DEVELOPMENT OF THE FUNDING VALUE OF ASSETS

Year Ended December 31:	2002	2003	2004	2005
A. Funding Value Beginning of Year	\$5,810,759,564			
B. Market Value End of Year	5,722,753,180			
C. Market Value Beginning of Year	5,810,759,564			
D. Non-Investment Net Cash Flow	78,343,885			
E. Investment Return				
E1. Market Total: B - C - D	(166,350,269)			
E2. Amount for Immediate Recognition (7.5%)	438,744,863			
E3. Amount for Phased-In Recognition: E1-E2	(605,095,132)			
F. Phased-In Recognition of Investment Gain/(loss)				
F1. Current Year: 0.25 x E3	\$ (151,273,783)			
F2. First Prior Year	-	\$ (151,273,783)		
F3. Second Prior Year	-	-	\$ (151,273,783)	
F4. Third Prior Year	-	-	-	\$ (151,273,783)
F5. Total Recognized Investment Gain/(Loss)	\$ (151,273,783)	\$ (151,273,783)	\$ (151,273,783)	\$ (151,273,783)
G. Total Return Amount Recognized this Year: E2 + F5	\$ 287,471,080			
H. Preliminary Funding Value End of Year: A + D + G	6,176,574,529			
H1. 120% of Market Value End of Year	6,867,303,816			
H2. 80% of Market Value End of Year	4,578,202,544			
H3. Funding Value End of Year: H, but not greater than H1, nor less than H2	6,176,574,529			
I. Difference between Market and Funding Value: B - H3	(453,821,349)	(302,547,566)	(151,273,783)	-

The Funding Value of Assets recognizes assumed investment income (line E2) fully each year. Differences between actual and assumed investment income (line E3) are phased in over a closed 4-year period. During periods when investment performance exceeds the assumed rate, Funding Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Funding Value of Assets will tend to be greater than market value. The Funding Value of Assets is unbiased with respect to Market Value. At any time it may be either greater or less than Market Value. If assumed rates are exactly realized for 4 consecutive years, it will become equal to Market Value.

DEVELOPMENT OF ASSETS AND LIABILITIES

REPORTED ASSETS (MARKET VALUE BASIS)

Reserve Allocation	Closed Plan	New Plan	Total
Member Reserves:			
Active and Inactive	\$2,551,239,549	\$270,056,637	\$2,821,296,186
Retired	565,804,709	1,640,952	567,445,661
Total Member Reserves	3,117,044,258	271,697,589	3,388,741,847
Employer Reserves:			
Active	-	289,162,091	289,162,091
Retired			
Pension Stabilization Fund	1,786,817,879	-	1,786,817,879
Other	243,312,830	14,718,533	258,031,363
Total	2,030,130,709	14,718,533	2,044,849,242
Total Employer Reserves	2,030,130,709	303,880,624	2,334,011,333
Total Reserves	\$5,147,174,967	\$575,578,213	\$5,722,753,180

ACTUARIAL ACCRUED LIABILITY: COMPUTED AND UNFUNDED

	Closed Plan	New Plan	Total
Retired Members and Beneficiaries:			
Computed accrued liability	\$ 4,411,727,837	\$17,338,655	\$ 4,429,066,492
Allocated assets (market value)	2,595,935,418	16,359,485	2,612,294,903
Funding Value adjustment	205,860,864	1,297,328	207,158,192
Unfunded Accrued Liability	1,609,931,555	(318,158)	1,609,613,397
Active and Inactive Members:			
Computed accrued liability	9,086,050,193	1,149,544,549	10,235,594,742
Allocated assets (market value)	2,551,239,549	559,218,728	3,110,458,277
Funding Value adjustment	202,316,426	44,346,731	246,663,157
Unfunded Accrued Liability	6,332,494,218	545,979,090	6,878,473,308
ISTRF Total:			
Computed accrued liability	13,497,778,030	1,166,883,204	14,664,661,234
Allocated assets (market value)	5,147,174,967	575,578,213	5,722,753,180
Funding Value adjustment	408,177,290	45,644,059	453,821,349
Unfunded Accrued Liability	\$ 7,942,425,773	\$545,660,932	\$ 8,488,086,705

CLOSED PLAN BALANCE SHEET
SUMMARY STATEMENT OF FUND RESOURCES AND OBLIGATIONS

PRESENT RESOURCES AND EXPECTED FUTURE RESOURCES

	Annuities	Pensions	Total
A. Funding value of system assets			
1. Net assets from Fund financial statements	\$3,117,044,258	\$ 2,030,130,710	\$ 5,147,174,968
2. Funding value adjustment	247,185,434	160,991,856	408,177,290
3. Funding value of assets	3,364,229,692	2,191,122,566	5,555,352,258
B. Actuarial present value of expected future employer contributions			
1. For normal costs	0	1,879,531,199	1,879,531,199
2. For unfunded actuarial accrued liability	0	7,942,425,774	7,942,425,774
3. Total	0	9,821,956,973	9,821,956,973
C. Total Present and Future Resources	\$3,364,229,692	\$12,013,079,539	\$15,377,309,231

**ACTUARIAL PRESENT VALUE OF EXPECTED FUTURE
BENEFIT PAYMENTS AND RESERVES**

	Annuities	Pensions	Total
A. To retired members and beneficiaries			
1. Annual benefits	\$ 607,004,582	\$ 3,801,054,120	\$ 4,408,058,702
2. Reserve*	3,669,135	0	3,669,135
3. Totals	610,673,717	3,801,054,120	4,411,727,837
B. To vested terminated members	194,088,740	148,819,638	342,908,378
C. To present active members			
1. Allocated to service rendered prior to valuation date	2,559,467,236	6,183,674,580	8,743,141,816
2. Allocated to service likely to be rendered after valuation date	0	1,879,531,199	1,879,531,200
3. Total	2,559,467,236	8,063,205,779	10,622,673,016
D. Total Actuarial Present Value of Expected Future Benefit Payments and Reserves	\$3,364,229,693	\$12,013,079,537	\$15,377,309,231

* The Retired Member Annuity Reserve has a value of less than zero on a Market Value basis.

NEW PLAN BALANCE SHEET
SUMMARY STATEMENT OF FUND RESOURCES AND OBLIGATIONS

PRESENT RESOURCES AND EXPECTED FUTURE RESOURCES

	Annuities	Pensions	Total
A. Funding value of system assets			
1. Net assets from Fund financial statements	\$271,697,589	\$ 303,880,624	\$ 575,578,213
2. Funding value adjustment	21,545,952	24,098,107	45,644,059
3. Funding value of assets	293,243,541	327,978,731	621,222,272
B. Actuarial present value of expected future employer contributions			
1. For normal costs	0	1,204,374,700	1,204,374,700
2. For unfunded actuarial accrued liability	0	545,660,933	545,660,933
3. Total	0	1,750,035,633	1,750,035,633
C. Total Present and Future Resources	\$293,243,541	\$2,078,014,364	\$2,371,257,905

**ACTUARIAL PRESENT VALUE OF EXPECTED FUTURE
BENEFIT PAYMENTS AND RESERVES**

	Annuities	Pensions	Total
A. To retired members and beneficiaries			
1. Annual benefits	\$ 1,760,440	\$ 15,567,573	\$ 17,328,013
2. Reserve*	10,642	0	10,642
3. Totals	1,771,082	15,567,573	17,338,655
B. To vested terminated members	28,009,912	12,558,540	40,568,452
C. To present active members			
1. Allocated to service rendered prior to valuation date	263,462,548	845,513,550	1,108,976,098
2. Allocated to service likely to be rendered after valuation date	0	1,204,374,700	1,204,374,700
3. Total	263,462,548	2,049,888,250	2,313,350,798
D. Total Actuarial Present Value of Expected Future Benefit Payments	\$293,243,542	\$2,078,014,363	\$2,371,257,905

* The Retired Member Annuity Reserve has a value of less than zero on a Market Value basis.

SECTION C

Historical Comparisons of Valuation Results and Data

**COMPUTED EMPLOYER CONTRIBUTION RATES
EXPRESSED AS PERCENTS OF PAYROLL
HISTORICAL COMPARISON**

CLOSED PLAN

Valuation Date June 30	Normal Cost	Unfunded Actuarial Accrued Liability (UAAL)			Total Employer Rate
		Active and Inactive	Retired	Totals	
1967	4.10%	4.56%	1.77%	6.33%	10.43%
1969	4.20	4.61	1.90	6.51	10.71
1971	4.17	4.22	2.07	6.29	10.46
1975#	6.31	3.51	1.38	4.89	11.20
1977	6.86	4.07	1.71	5.78	12.64
1979	6.75	4.20	1.81	6.01	12.76
1980	6.71	4.26	1.80	6.06	12.77
1981	6.75	4.02	1.72	5.74	12.49
1983#	6.50	2.46	1.15	3.61	10.11
1985	6.35	2.63	1.05	3.68	10.03
1987	6.35	2.70	1.02	3.72	10.07
1989#	7.59	3.16	0.96	4.12	11.71
1991	7.50	3.26	0.95	4.21	11.71
1992#	7.79	3.39	0.99	4.38	12.17
1993	7.79	3.37	1.01	4.38	12.17
1994	7.79	3.44	1.07	4.51	12.30
1995(a)	7.79	3.46	1.14	4.60	12.39
1995(b)	7.79	6.73	2.22	8.95	16.74
1996(b)	7.79	6.83	2.34	9.17	16.96
1997#(b)	7.44	7.07	2.26	9.33	16.77
1998(b)	7.42	7.41	2.27	9.68	17.10
1999(b)	7.42	7.76	1.84	9.60	17.02
2000	7.39	8.21	1.95	10.16	17.55
2001	7.32	8.48	2.05	10.53	17.85
2002#	7.39	8.74	2.23	10.97	18.36

(a) Based on interest-only financing of UAAL. Years prior to 1995 are also interest-only.

(b) Based on closed 40-year amortization of UAAL beginning with the 1999 valuation. Open 40-year amortization of UAAL was used for the 1995-1998 valuations. Previous years are based on interest-only financing.

After amendments and/or revised actuarial assumptions or methods.

**COMPUTED EMPLOYER CONTRIBUTION RATES
EXPRESSED AS PERCENTS OF PAYROLL
HISTORICAL COMPARISON**

NEW PLAN

Valuation Date June 30	Normal Cost	Unfunded Actuarial Accrued Liability (UAAL)			Total Employer Rate
		Active and Inactive	Retired	Totals	
1996(b)	7.66%	1.36%	0.00%	1.36%	9.02%
1997#(b)	7.61	1.51	0.00	1.51	9.12
1998(b)	7.61	1.46	0.00	1.46	9.07
1999(b)	7.58	1.70	0.00	1.70	9.28
2000	7.61	1.93	0.00	1.93	9.54
2001	7.46	1.86	0.00	1.86	9.32
2002#	7.53	1.97	0.00	1.97	9.50

(b) Based on closed 40-year amortization of UAAL beginning with the 1999 valuation. Open 40-year amortization of UAAL was used for the 1996-1998 valuations.

After amendments and/or revised actuarial assumptions or methods.

**HISTORICAL COMPARISON
CLOSED PLAN
ACTUARIAL ACCRUED LIABILITY - PERCENT FUNDED**

If the contributions to ISTRF are level in concept and soundly executed, the Fund will *pay all promised benefits when due -- the ultimate indicator of financial soundness.*

One short-term means of checking a fund's progress under its funding program is shown below. In this indicator, the fund's present assets (cash and investments) are compared with:

- 1) active member contributions on deposit;
- 2) liability for future benefits to present retired lives; and
- 3) liability for service already rendered by active members.

In a fund that has been following the discipline of level percent-of-payroll financing, the liability for active member contributions on deposit (Liability 1) and the liability for future benefits to present retired lives (Liability 2) will be fully covered by present assets (except in rare circumstances). In addition, the liability for service already rendered by active members (Liability 3) will be partially covered by the remainder of present assets. The State's past practice of contributing on a "pay-as-you-go" basis has resulted in Liability 2 being less than 100% funded in the Closed Plan.

June 30	Computed Actuarial Accrued Liability			Valuation Assets	Portion of Accrued Liability Covered by Assets		
	(1) Member Contr.	(2) Retired Members	(3) Present Members (Employer-Financed Portion) (\$ in Millions)		(1)	(2)	(3)
1975#(a)	\$ 216	\$ 451	\$ 903	\$ 312	100%	21%	0%
1977#	265	634	1,246	375	100	17	-
1979#(a)	324	777	1,481	466	100	18	-
1980	373	838	1,632	539	100	18	-
1981	423	885	1,649	601	100	20	-
1983(a)	544	1,043	1,751	765	100	21	-
1985	713	1,198	2,112	1,073	100	30	-
1987	932	1,406	2,499	1,401	100	33	-
1989#	1,132	1,624	3,449	1,707	100	35	-
1991	1,373	1,853	3,956	2,161	100	43	-
1992(a)	1,521	2,059	4,369	2,376	100	42	-
1993	1,665	2,290	4,553	2,592	100	41	-
1994	1,812	2,483	4,792	2,808	100	40	-
1995	1,930	2,716	5,029	2,984	100	39	-
1996	2,070	2,968	5,245	3,242	100	39	-
1997(a)	2,188	3,234	5,447	3,678	100	46	-
1998	2,374	3,479	5,629	4,130	100	50	-
1999	2,500	3,659	6,014	4,731	100	61	-
2000	2,699	3,890	5,819	5,210	100	65	-
2001	2,669	4,121	5,905	5,363	100	65	-
2002(a)	2,754	4,412	6,332	5,555	100	63	-

Legislated plan amendments.

(a) Actuarial assumptions or methods revised.

**HISTORICAL COMPARISON
NEW PLAN
ACTUARIAL ACCRUED LIABILITY - PERCENT FUNDED**

June 30	Computed Actuarial Accrued Liability			Valuation Assets	Portion of Accrued Liability Covered by Assets		
	(1) Member Contr.	(2) Retired Members	(3) Present Members (Employer-Financed Portion) (\$ in Millions)		(1)	(2)	(3)
1996	\$ 14	\$ 0.3	\$ 33	\$ 21	100%	100%	21%
1997(a)	46	0.4	130	72	100	100	20
1998	74	2.6	222	136	100	100	27
1999	126	3.9	369	240	100	100	30
2000	195	9.8	502	368	100	100	33
2001	211	12.1	605	447	100	100	37
2002(a)	291	17.3	858	621	100	100	36

(a) Actuarial assumptions or methods revised.

The excess of accrued liability over valuation assets reflects the inclusion of new hires with prior service credit.

CLOSED PLAN

UNFUNDED ACTUARIAL ACCRUED LIABILITY

June 30	Computed Actuarial Accrued Liability*	Valuation Assets	Unfunded Actuarial Accrued Liability (UAAL)
1975#(a)	\$ 1,570	\$ 312	\$ 1,258
1977#	2,145	375	1,770
1979#(a)	2,582	466	2,116
1980	2,843	539	2,304
1981	2,957	601	2,356
1983(a)	3,338	765	2,573
1985	4,023	1,073	2,950
1987	4,837	1,401	3,436
1989#	6,205	1,707	4,498
1991	7,182	2,161	5,021
1992(a)	7,949	2,376	5,573
1993	8,508	2,592	5,916
1994	9,087	2,809	6,279
1995	9,675	2,984	6,691
1996	10,283	3,242	7,041
1997(a)	10,868	3,678	7,190
1998	11,481	4,130	7,351
1999	12,173	4,731	7,442
2000	12,409	5,210	7,199
2001	12,696	5,363	7,332
2002(a)	13,498	5,555	7,942

NEW PLAN

UNFUNDED ACTUARIAL ACCRUED LIABILITY

June 30	Computed Actuarial Accrued Liability*	Valuation Assets	Unfunded Actuarial Accrued Liability (UAAL)
1996	\$ 48	\$ 21	\$ 27
1997(a)	176	72	104
1998	298	136	162
1999	498	240	258
2000	706	368	338
2001	828	447	381
2002(a)	1,167	621	546

Legislated plan amendments.

(a) Actuarial assumptions or methods revised.

* Including annuity reserve.

The presence of unfunded actuarial accrued liability in the New Plan reflects the inclusion of transfers from the Closed Plan with prior service credit.

RETIRED MEMBERS AND BENEFICIARIES MONTHLY ALLOWANCES AND RELATED LIABILITY HISTORICAL COMPARISON

Closed Plan

Valuation June 30	Monthly Allowances Being Paid				Computed Liability		Reserves Available for Retired Members	Ratio of Reserves to Liability
	Number	Annuities	Pensions	Avg. Total Allowances	Annuities #	Pensions		
1976*	19,961	\$ 713,332	\$ 4,949,716	\$ 284	\$ 90,519,552	\$ 430,998,792	\$ 103,417,581	19.8 %
1977	20,670	767,214	5,419,783	299	81,192,972	553,129,812	109,541,561	17.3
1978	21,312	821,780	5,981,203	319	87,002,688	608,034,852	122,903,169	17.7
1979	21,808	875,217	6,478,769	337	92,554,872	684,265,584	138,791,199	17.9
1980	22,255	933,253	7,609,102	384	98,744,304	739,477,692	152,227,411	18.2
1981	22,738	1,003,764	7,891,508	391	106,525,692	778,993,680	178,126,912	20.1
1982	23,261	1,086,088	8,656,992	419	109,389,360	853,368,564	210,986,498	21.9
1983*	23,631	1,167,337	9,576,598	455	121,488,456	921,241,128	220,447,081	21.1
1984	24,042	1,270,621	10,152,389	475	132,872,688	969,470,076	267,364,320	24.3
1985	24,496	1,412,942	10,989,033	506	149,309,064	1,049,064,600	360,036,868	30.0
1986	24,954	1,580,585	11,848,715	538	168,855,576	1,127,083,092	423,496,495	32.7
1987	25,492	1,771,901	12,705,712	568	191,274,096	1,214,737,224	468,533,788	33.3
1988	25,849	1,954,326	13,521,271	599	212,323,404	1,295,323,680	525,277,956	34.8
1989	26,173	2,158,461	14,387,419	632	235,879,716	1,387,778,748	575,176,619	35.4
1990	26,664	2,448,268	15,649,770	679	270,612,204	1,521,301,656	664,922,515	37.1
1991	27,177	2,729,359	15,498,308	671	300,739,500	1,552,581,216	787,869,959	42.5
1992*	27,759	3,006,489	16,441,198	701	341,941,104	1,717,495,500	855,640,166	41.5
1993	28,194	3,439,687	17,180,701	731	469,421,977	1,820,905,044	927,804,051	41.0
1994	28,677	3,695,040	18,563,890	776	499,429,500	1,983,402,204	996,033,842	40.1
1995	29,364	3,955,212	20,228,163	824	534,973,912	2,181,300,588	1,054,045,397	38.8
1996	30,120	4,212,455	22,081,911	873	564,310,332	2,404,081,944	1,172,253,144	39.5
1997*	30,657	4,432,010	23,949,443	926	590,012,474	2,643,637,512	1,490,448,302	46.1
1998	31,307	4,650,748	25,867,893	975	607,908,268	2,870,838,240	1,756,324,911	50.5
1999@	32,018	4,843,545	27,524,587	1,011	625,058,387	3,034,060,036	2,231,076,672	61.0
2000	32,818	5,057,926	30,285,194	1,077	648,366,105	3,242,529,456	2,510,470,810	64.5
2001	33,698	5,231,219	32,544,302	1,121	618,238,221	3,503,121,001	2,694,552,158	65.4
2002	34,646	5,444,155	34,613,345	1,156	610,673,717	3,801,054,120	2,801,796,282	63.5

* Revised assumptions.

Includes annuity reserve.

@ The data did not include the COLA effective 7/1/99. An adjustment was made to the pension liability and projected pension payouts for valuation purposes.

**RETIRED MEMBERS AND BENEFICIARIES MONTHLY ALLOWANCES AND RELATED LIABILITY
HISTORICAL COMPARISON**

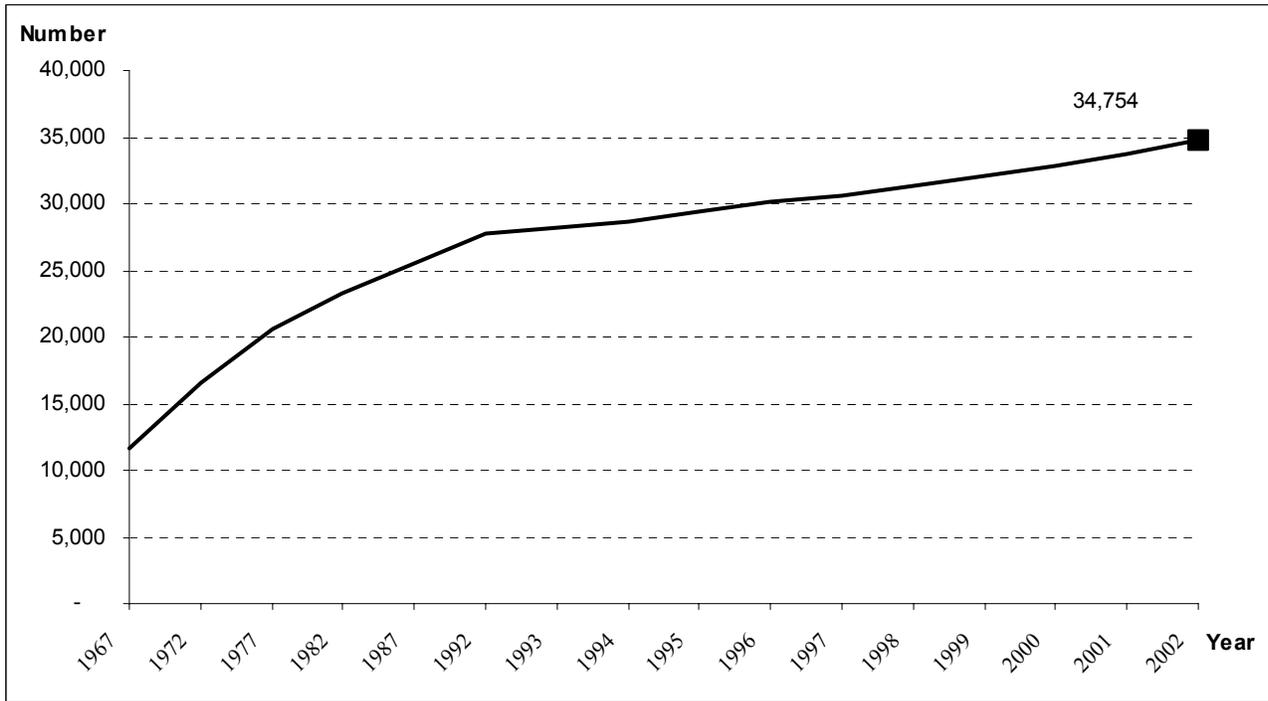
New Plan

Valuation June 30	Monthly Allowances Being Paid				Computed Liability		Reserves Available for	Ratio of Reserves to
	Number	Annuities	Pensions	Avg. Total Allowances	Annuities #	Pensions	Retired Members	Liability
1996	1	\$ 334	\$ 1,727	\$ 2,061	\$ 55,108	\$ 248,376	\$ 303,484	100.0%
1997*	1	334	1,762	2,096	133,846	252,564	386,410	100.0
1998	18	2,257	16,494	1,042	431,846	2,219,496	2,703,524	100.0
1999	30	3,311	28,760	1,069	498,774	3,404,460	3,903,234	100.0
2000	60	7,460	62,532	1,167	1,126,062	7,553,052	8,679,114	100.0
2001	85	8,169	90,677	1,163	1,138,375	10,942,426	13,070,250	108.2
2002	108	13,328	125,194	1,283	1,771,082	15,567,573	17,656,813	101.8

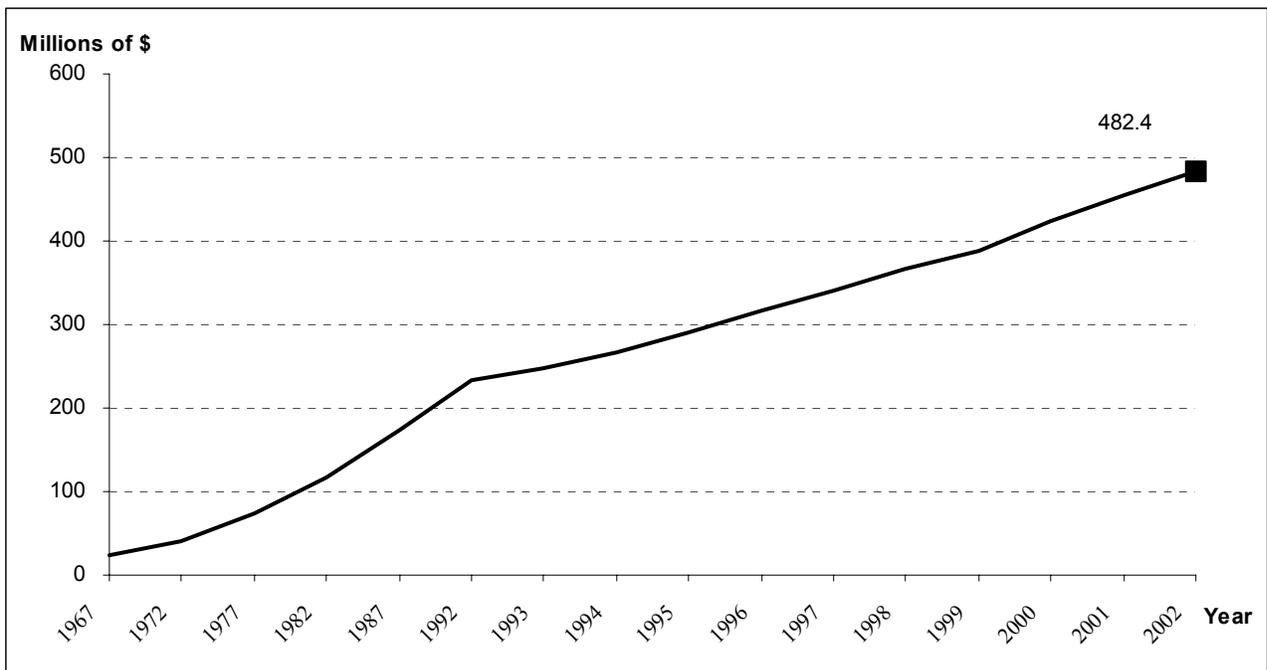
* Revised assumptions.

Includes annuity reserve.

RETIRED MEMBERS AND BENEFICIARIES RECEIVING BENEFITS



TOTAL ANNUAL RETIREMENT ALLOWANCES BEING PAID



ACTIVE MEMBER DATA HISTORICAL COMPARISON

Closed Plan						
Valuation Date June 30	No. of Active Members	Valuation Payroll (+000)	Averages			Annual Increase
			Age	Service	Salary	
1975	63,932	\$ 749,200	38.7 yrs.	10.9 yrs.	\$ 11,719	
1977	65,573	891,780	39.0	11.2	13,600	7.7%
1979	66,523	1,024,888	39.4	11.5	15,406	6.4
1980	66,575	1,107,699	39.7	11.9	16,638	8.0
1981	65,283	1,194,856	40.0	12.2	18,303	10.0
1983	64,280	1,350,061	41.1	13.3	21,003	7.1
1985	62,932	1,519,887	41.5	14.2	24,151	7.2
1987	64,157	1,751,709	42.0	14.5	27,303	6.3
1989	65,986	2,044,797	42.6	14.9	30,988	6.5
1991	63,373	2,278,715	43.0	15.4	35,957	7.7
1992	63,980	2,416,263	43.8	16.0	37,766	5.0
1993	64,594	2,536,165	44.0	16.1	39,263	4.0
1994	65,209	2,614,915	44.1	16.2	40,101	2.1
1995	66,542	2,728,811	44.2	16.2	41,009	2.3
1996	70,183	2,805,823	44.2	15.7	39,979	(2.5)
1997	63,520	2,739,436	45.4	16.9	43,127	7.9
1998	59,030	2,699,183	46.4	18.0	45,726	6.0
1999	56,560	2,755,489	47.4	19.3	48,718	6.5
2000	52,920	2,561,533	48.2	20.1	48,404	(0.6)
2001	50,802	2,564,451	48.7	20.7	50,479	4.3
2002	47,510	2,604,956	49.4	21.5	54,830	8.6

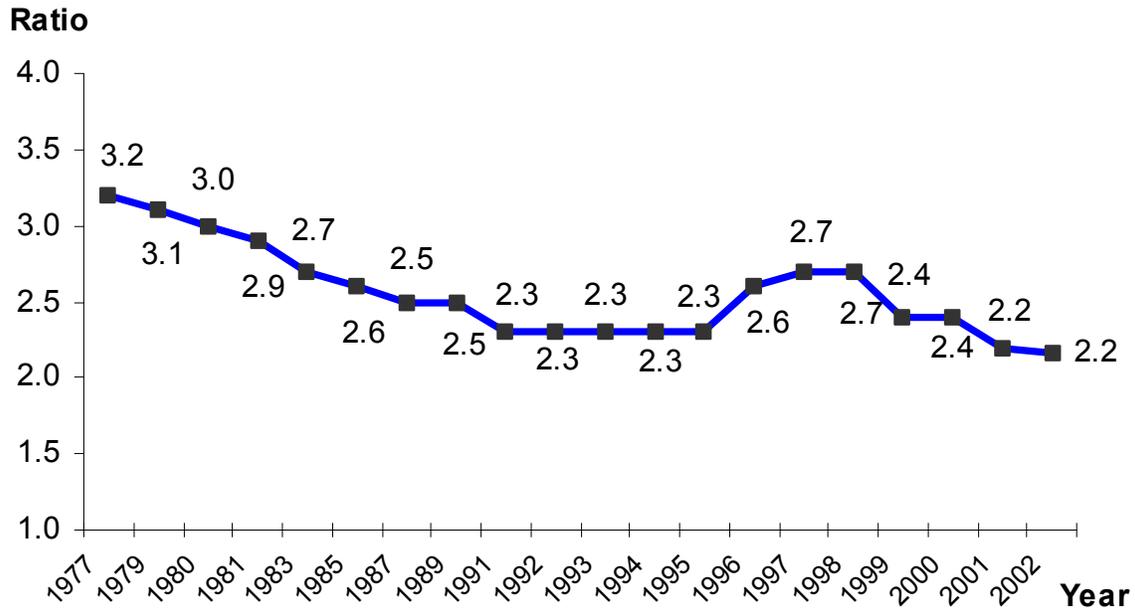
New Plan

Valuation Date June 30	No. of Active Members	Valuation Payroll (+000)	Averages			Annual Increase
			Age	Service	Salary	
1996	8,683	\$ 72,506	32.2 yrs.	1.3 yrs.	\$ 8,350	
1997	20,686	245,168	33.0	1.8	11,852	41.9%
1998	25,634	395,758	33.6	2.2	15,439	30.3
1999	21,185*	538,837	35.3	4.0	25,435	64.7
2000	24,950	631,072	36.4	4.7	25,293	(0.6)
2001	24,846	754,426	36.3	5.5	30,364	20.0
2002	27,873	1,004,515	36.7	6.1	36,039	18.7

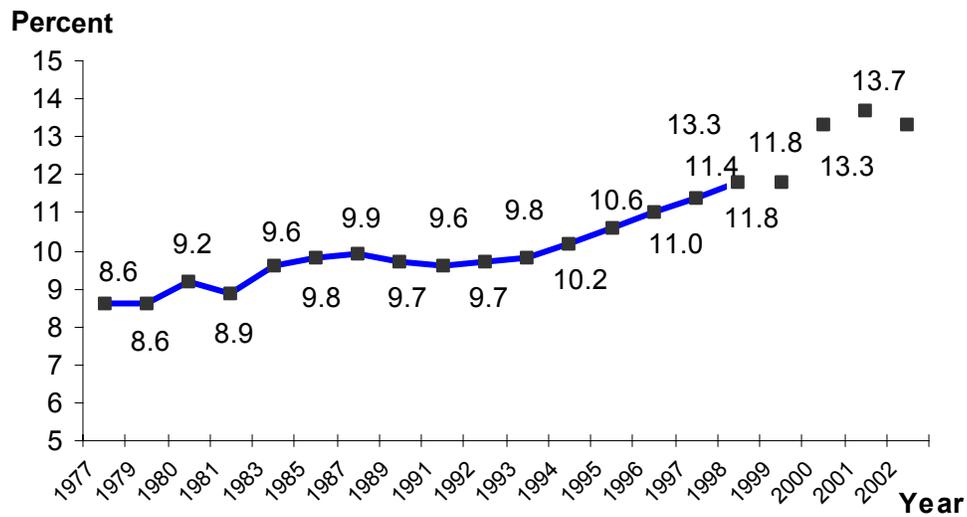
* Excludes non-degreed substitute teachers (who had previously been included in the data but who do not participate in the Fund).

TRF COMPARATIVE STATISTICAL RATIOS

Active Members Per Retired Life



Annual Retirement Allowances as a Percent of Valuation Payroll



SECTION D

Population Projections

CLOSED GROUP ACTUARIAL PROJECTIONS

The schedules on the following pages were produced by means of an actuarial projection.

Whereas actuarial valuations provide a snapshot of the Retirement Fund as of a given date, actuarial projections provide a moving picture of Retirement Fund activities. The projected active and retired groups are developed from year to year by applying assumptions regarding pre-retirement withdrawal from service, retirements, deaths, and disabilities. Projected information regarding plan activity produces an expected future benefit payout stream.

Projection results are useful in demonstrating changing relationships among key elements affecting system financial activity. For example: how benefits payable and assets will grow in future decades. **Projections are not predictions of specific future events and do not provide numeric precision in absolute terms.** For instance, benefits projected to occur 10 years in the future will not be exact (except by coincidence), but understanding the changed relationships over a period of years can be very useful.

The closed group New Plan projection is provided in the section for completeness. The New Plan membership will, in fact, grow in size, as members of the Closed Plan leave active status and are replaced by New Plan participants.

A graphical representation of the population counts that are contained in the following pages is shown in the Introduction, on page 3, at the beginning of this report.

CLOSED PLAN
ACTIVE AND RETIRED MEMBER CLOSED GROUP PROJECTION
BASED ON JUNE 30, 2002 VALUATION DATA AND ASSUMPTIONS
(\$ IN MILLIONS)

Year	Active Members		Retired Members	
	Number	Payroll	Number	State-Financed
				Payroll
2002	47,510	\$ 2,605.0	34,646	\$ 415.4
2003	44,929	2,634.6	36,218	448.0
2004	42,439	2,659.2	37,272	479.5
2005	39,922	2,670.7	38,433	509.2
2006	37,369	2,666.4	39,679	544.5
2007	34,779	2,644.5	41,015	586.2
2008	32,160	2,604.4	42,439	631.6
2009	29,533	2,545.4	43,910	683.4
2010	26,943	2,469.7	45,344	739.9
2011	24,427	2,380.0	46,691	799.1
2012	22,019	2,278.1	47,974	860.8
2013	19,728	2,165.7	49,177	924.2
2014	17,602	2,048.8	50,201	986.3
2015	15,638	1,928.8	51,007	1,046.0
2016	13,832	1,806.8	51,622	1,103.2
2017	12,174	1,682.8	52,059	1,157.7
2018	10,667	1,559.9	52,282	1,208.3
2019	9,320	1,441.4	52,266	1,253.6
2020	8,115	1,327.3	52,062	1,293.9
2021	7,042	1,217.6	51,664	1,329.0
2022	6,084	1,111.6	51,115	1,359.3
2023	5,233	1,010.5	50,399	1,383.8
2024	4,472	912.9	49,531	1,403.3
2025	3,787	817.5	48,524	1,418.0
2026	3,174	724.6	47,391	1,428.0
2027	2,629	634.0	46,155	1,433.4
2028	2,156	549.7	44,816	1,433.4
2029	1,752	471.8	43,369	1,427.7
2030	1,404	399.6	41,830	1,416.7
2031	1,111	334.1	40,193	1,400.1

Note: Projections are intended to demonstrate the pattern of future activities and should not be viewed as a prediction of specific dollar amounts in any year.

CLOSED PLAN
ACTIVE AND RETIRED MEMBER CLOSED GROUP PROJECTION
BASED ON JUNE 30, 2002 VALUATION DATA AND ASSUMPTIONS
(\$ IN MILLIONS)

- CONTINUED -

Year	Active Members		Retired Members	
	Number	Payroll	Number	State Financed
				Payroll
2032	864	\$ 273.7	38,471	\$ 1,378.1
2033	661	220.9	36,689	1,350.4
2034	496	174.8	34,863	1,317.3
2035	365	135.4	33,019	1,279.6
2036	264	103.1	31,152	1,237.3
2037	188	76.7	29,264	1,191.0
2038	132	56.2	27,363	1,141.2
2039	90	40.2	25,480	1,088.7
2040	59	27.5	23,635	1,034.4
2041	37	17.8	21,842	978.8
2042	22	11.1	20,112	922.3
2043	13	6.9	18,448	865.3
2044	8	4.4	16,858	808.5
2045	5	2.9	15,345	752.6
2046	3	1.7	13,917	697.9
2047	1	0.9	12,576	644.9
2048	1	0.3	11,322	593.6
2049	0	0.1	10,155	544.4
2050	0	0.0	9,074	497.1
2051	-	-	8,077	452.2

Note: Projections are intended to demonstrate the pattern of future activities and should not be viewed as a prediction of specific dollar amounts in any year.

NEW PLAN
ACTIVE AND RETIRED MEMBER CLOSED GROUP PROJECTION
BASED ON JUNE 30, 2002 VALUATION DATA AND ASSUMPTIONS
(\$ IN MILLIONS)

Year	Active Members		Retired Members	
	Number	Payroll	Number	State-Financed
				Payroll
2002	27,873	\$ 1,004.5	108	\$ 1.5
2003	25,438	1,010.7	214	2.9
2004	23,660	1,028.5	333	4.6
2005	22,277	1,054.9	471	6.8
2006	21,155	1,088.1	626	9.4
2007	20,227	1,126.4	822	12.7
2008	19,394	1,166.3	1,048	16.7
2009	18,603	1,206.5	1,319	21.5
2010	17,839	1,246.3	1,627	27.2
2011	17,090	1,284.4	1,985	34.0
2012	16,334	1,319.9	2,402	42.0
2013	15,583	1,352.9	2,870	51.3
2014	14,852	1,382.8	3,369	61.9
2015	14,126	1,408.7	3,890	73.7
2016	13,418	1,431.4	4,416	86.6
2017	12,720	1,450.2	4,964	100.6
2018	12,041	1,465.9	5,492	115.4
2019	11,398	1,479.5	5,987	130.8
2020	10,774	1,489.3	6,484	147.4
2021	10,181	1,497.3	6,948	164.8
2022	9,609	1,502.7	7,392	183.2
2023	9,055	1,504.9	7,834	203.0
2024	8,516	1,503.7	8,265	224.3
2025	7,986	1,497.8	8,685	247.6
2026	7,448	1,482.9	9,113	273.9
2027	6,895	1,456.5	9,565	304.0
2028	6,324	1,415.7	10,032	338.4
2029	5,736	1,359.9	10,526	377.4
2030	5,139	1,289.3	11,038	420.6
2031	4,536	1,204.0	11,553	467.8

Note: Projections are intended to demonstrate the pattern of future activities and should not be viewed as a prediction of specific dollar amounts in any year.

NEW PLAN
ACTIVE AND RETIRED MEMBER CLOSED GROUP PROJECTION
BASED ON JUNE 30, 2002 VALUATION DATA AND ASSUMPTIONS
(\$ IN MILLIONS)

- CONTINUED -

Year	Active Members		Retired Members	
	Number	Payroll	Number	State Financed
				Payroll
2032	3,939	\$ 1,106.1	12,082	\$ 518.2
2033	3,359	997.7	12,595	570.6
2034	2,814	884.2	13,073	623.3
2035	2,318	771.0	13,502	674.1
2036	1,878	661.3	13,853	721.3
2037	1,494	556.7	14,137	764.1
2038	1,166	458.2	14,326	801.1
2039	889	368.4	14,408	831.2
2040	660	288.2	14,370	854.1
2041	477	218.8	14,244	869.7
2042	335	161.5	14,054	878.0
2043	228	114.4	13,787	879.7
2044	149	77.6	13,435	874.9
2045	93	50.4	12,994	864.0
2046	56	31.0	12,511	848.0
2047	30	16.9	12,006	828.0
2048	13	7.0	11,486	804.8
2049	4	1.7	10,953	778.2
2050	0	0.0	10,411	748.9
2051	0	0.0	9,864	717.9

Note: Projections are intended to demonstrate the pattern of future activities and should not be viewed as a prediction of specific dollar amounts in any year.

SECTION E

Summary of Benefit Provisions

SUMMARY OF BENEFIT PROVISIONS (SUMMARY UPDATED TO JUNE 30, 2002)

REGULAR RETIREMENT (NO REDUCTION FACTOR FOR AGE)

Eligibility - Age 65 with 10 years service or age 60 with 15 or more years of service or if age is at least 55 and the sum of age plus credited service is 85 or more.

Mandatory Retirement Age - None.

Annual Amount - State pension equal to total service times 1.1% of Average Annual Compensation.

Type of Final Average Salary - Average of highest 5 years of compensation. Years do not need to be continuous.

EARLY RETIREMENT (AGE REDUCTION FACTOR USED)

Eligibility - Age 50 with 15 or more years of service.

Annual Amount - State pension is computed as regular retirement benefit, but reduced for each month between age at early retirement and attainment of age 65. The age reduction factor is calculated as follows:

- 1/10 of 1% for all months from age 60 to 65.
- 5/12 of 1% for months from age at early retirement to 60.

DEFERRED RETIREMENT (VESTED BENEFIT)

Eligibility - 10 years of service. Benefit commences at regular or early retirement eligibility.

Annual Amount - Computed as a regular retirement benefit with state pension based on service and Average Annual Compensation at termination.

DISABILITY RETIREMENT

Classroom disability benefit:

Eligibility - 5 years of service.

Annual Amount - \$125 per month plus \$5 per month for each year of service credit over 5 years.

Alternative disability benefit:

Eligibility - 5 years of service and determined to be disabled by the Social Security Administration. Annual verification of Social Security disability is required.

Annual Amount – Computed as a regular retirement benefit using creditable service to the date of disability and without reduction for early retirement. The minimum benefit is \$100 per month.

SUMMARY OF BENEFIT PROVISIONS (CONTINUED) (SUMMARY UPDATED TO JUNE 30, 2002)

DEATH BEFORE RETIREMENT

Eligibility - 15 years of service. Spouse to whom member had been married for 2 or more years is automatically eligible, or a dependent may be designated as beneficiary.

Annual Amount - Computed as regular retirement benefit but reduced in accordance with a 100% joint and survivor election.

BENEFIT INCREASES AFTER RETIREMENT

No automatic increases after retirement are provided. Periodically, unscheduled increases have been made.

MEMBER CONTRIBUTIONS

All Fund members are required by state law to contribute 3% of salary contributions to their Annuity Savings Account. These 3% contributions are “picked up” by the employer and contributed on a pre-tax basis on behalf of the employee. Extra voluntary contributions by the member are also possible but on a post-tax basis. At retirement, there are six alternatives for receiving the proceeds of this account including lump sums, full and partial rollovers, full and partial annuitization of the balance and deferred distribution.

FORMS OF BENEFIT PAYMENT (STATE PENSION)

The normal form of benefit payment (**Option A-1**) is a single life annuity with a 5-year certain period. There are 5 optional forms of payment available as listed below. Additionally, members retiring between ages 50 and 62 may integrate their pension benefit with their Social Security benefit by choosing Social Security Integration (**Option A-4**) in conjunction with the normal form or any other optional form selected. Optional forms of payment are calculated on an actuarial equivalent basis.

Option A-2: Straight Life benefit with no certain period.

Option A-3: Modified Cash Refund Annuity (operates in conjunction with the Annuity Savings Account).

Option B-1: 100% Survivorship.

Option B-2: 66 2/3% Survivorship.

Option B-3: 50% Survivorship

State law provides for actuarially adjusted and recalculated benefits based on a new optional form election in the event of the death of the member’s spouse after retirement. (IC 5-10.2-4-7)

BENEFIT CHANGES DURING RECENT YEARS OF RETIREMENT AND RELATED CHANGES IN PURCHASING POWER

Retiring During Year Ending	March 31 CPI	Value of \$100 in 2002 Before Accumulated Increases	Accumulated Increases*	Value of \$100 in 2002 After Accumulated Increases
6/30/1955	26.9	15.40	272.49%	\$ 57.35
6/30/1959	29.1	16.66	244.33	57.35
6/30/1960	29.5	16.89	239.66	57.35
6/30/1961	30.0	17.17	234.00	57.35
6/30/1962	30.3	17.34	230.69	57.35
6/30/1963	30.7	17.57	226.38	57.35
6/30/1964	31.1	17.80	222.18	57.35
6/30/1965	31.5	18.03	218.09	57.35
6/30/1966	32.3	18.49	210.21	57.35
6/30/1967	33.2	19.00	201.80	57.35
6/30/1968	34.5	19.75	190.43	57.35
6/30/1969	36.3	20.78	176.03	57.35
6/30/1970	38.4	21.98	160.93	57.35
6/30/1971	40.2	23.01	149.25	57.35
6/30/1972	41.6	23.81	140.86	57.35
6/30/1973	43.6	24.96	129.81	57.35
6/30/1974	48.0	27.48	111.32	58.06
6/30/1975	53.0	30.34	109.31	63.50
6/30/1976	56.2	32.17	95.51	62.89
6/30/1977	59.8	34.23	89.88	65.00
6/30/1978	63.7	36.46	82.56	66.57
6/30/1979	70.3	40.24	77.25	71.32
6/30/1980	80.5	46.08	68.79	77.78
6/30/1981	89.0	50.94	51.67	77.27
6/30/1982	94.8	54.26	41.30	76.68
6/30/1983	98.4	56.33	37.19	77.27
6/30/1984	101.8	58.27	33.23	77.64
6/30/1985	105.9	60.62	28.10	77.65
6/30/1986	107.9	61.76	24.34	76.80
6/30/1987	111.0	63.54	23.11	78.22
6/30/1988	115.1	65.88	18.35	77.98
6/30/1989	120.8	69.15	16.03	80.23
6/30/1990	127.1	72.75	16.03	84.42
6/30/1991	133.0	76.13	14.05	86.83
6/30/1992	137.0	78.42	14.05	89.44
6/30/1993	141.1	80.77	12.92	91.20
6/30/1994	144.4	82.66	9.61	90.60
6/30/1995	148.7	85.12	9.61	93.29
6/30/1996	152.9	87.52	5.09	91.98
6/30/1997	157.0	89.87	2.01	91.67
6/30/1998	158.7	90.84	2.01	92.67
6/30/1999	161.4	92.39	2.01	94.24
6/30/2000	167.9	96.11	1.00	97.07
6/30/2001	172.6	98.80	0.00	98.80
6/30/2002	174.7	100.00	0.00	100.00

*Includes COLA effective 1/1/2003 pursuant to IC 5-10.2-5-32.

SECTION F

Details of Valuation Data

CLOSED PLAN
RETIRED MEMBERS AND BENEFICIARIES JUNE 30, 2002
MONTHLY BENEFIT AMOUNTS BY TYPE OF BENEFIT BEING PAID

Type of Benefit	Number	Monthly Amounts Being Paid		
		Annuities	Pensions	Total
Age and Service				
Option A-1 - 5 YR. CERT.				
(Regular)	8,057	\$ 1,077,101	\$ 7,317,332	\$ 8,394,433
(With Opt. A-4)	596	74,443	1,092,359	1,166,802
(S.S. After 65)	2,547	299,515	1,580,563	1,880,078
Option A-2 - S.L.				
(Regular)	4,343	706,330	4,385,647	5,091,977
(With Opt. A-4)	305	46,961	572,276	619,237
(S.S. After 65)	831	128,259	632,818	761,077
Option A-3 - CRA				
(Regular)	911	215,120	881,564	1,096,684
(With Opt. A-4)	51	22,492	90,921	113,413
(S.S. After 65)	350	71,567	248,128	319,695
Option B-1 - 100%JS				
(Regular)	5,903	1,080,122	6,852,103	7,932,225
(With Opt. A-4)	416	60,297	762,926	823,223
(S.S. After 65)	1,311	228,077	1,226,783	1,454,860
Option B-2 - 67%JS				
(Regular)	1,838	397,358	2,333,872	2,731,230
(With Opt. A-4)	106	16,483	216,675	233,158
(S.S. After 65)	526	108,002	533,764	641,766
Option B-3 - 50%JS				
(Regular)	2,017	397,148	2,429,731	2,826,879
(With Opt. A-4)	158	24,168	306,318	330,486
(S.S. After 65)	677	121,836	661,076	782,912
Survivor Beneficiary				
(Regular)	2,054	241,206	1,543,853	1,785,059
(With Opt. A-4)	16	2,855	23,759	26,614
(S.S. After 65)	358	48,416	221,050	269,466
Age and Service Totals	33,371	\$ 5,367,756	\$ 33,913,518	\$ 39,281,274

**CLOSED PLAN
 RETIRED MEMBERS AND BENEFICIARIES JUNE 30, 2002
 MONTHLY BENEFIT AMOUNTS BY TYPE OF BENEFIT BEING PAID
 (Continued)**

Type of Benefit	Number	Monthly Amounts Being Paid		
		Annuities	Pensions	Total
Non-Duty Disability				
Option A-1 - 5 YR. CERT. (Regular)	74	0	\$ 24,967	\$ 24,967
Option A-2 - S.L. (Regular)	1	32	259	291
Totals	75	32	25,226	25,258
Non-Duty Death				
Spouse (Regular)	1,200	76,367	674,601	750,968
Totals	1,200	76,367	674,601	750,968
Casualty Totals	1,275	76,399	699,827	776,226
Total Allowances Being Paid	34,646	\$5,444,155	\$34,613,345	\$ 40,057,500

NEW PLAN
RETIRED MEMBERS AND BENEFICIARIES JUNE 30, 2002
MONTHLY BENEFIT AMOUNTS BY TYPE OF BENEFIT BEING PAID

Type of Benefit	Number	Monthly Amounts Being Paid		
		Annuities	Pensions	Total
Age and Service				
Option A-1 - 5 YR. CERT.				
(Regular)	25	\$ 4,269	\$ 25,978	\$ 30,247
(With Opt. A-4)	7	571	14,289	14,860
(S.S. After 65)	2	487	1,159	1,646
Option A-2 - S.L.				
(Regular)	17	1,624	22,196	23,820
(With Opt. A-4)	2	0	3,328	3,328
(S.S. After 65)	2	669	1,577	2,246
Option A-3 - CRA				
(Regular)	7	2,228	5,939	8,167
Option B-1 - 100%JS				
(Regular)	23	2,216	20,088	22,304
(With Opt. A-4)	5	210	10,926	11,136
(S.S. After 65)	2	0	3,712	3,712
Option B-2 - 67%JS				
(Regular)	5	529	7,934	8,463
(S.S. After 65)	1	334	934	1,268
Option B-3 - 50%JS				
(Regular)	3	191	1,991	2,182
(With Opt. A-4)	1	0	1,824	1,824
Survivor Beneficiary				
(Regular)	1	0	100	100
Age and Service Totals	103	13,328	121,975	135,303
Non-Duty Death				
Spouse				
(Regular)	5	0	3,219	3,219
Casualty Totals	5		3,219	3,219
Total Allowances Being Paid	108	\$ 13,328	\$125,194	\$ 138,522

CLOSED PLAN
RETIRED MEMBERS AND BENEFICIARIES JUNE 30, 2002
TABULATED BY YEAR OF RETIREMENT

Year of Retirement	No.	Monthly Pensions	
		Total	Average
Before 1950	22	\$ 14,273	\$ 4,016
1950-1959	87	48,283	5,082
1960	27	11,739	435
1961	36	15,317	426
1962	40	14,005	350
1963	38	13,789	363
1964	66	26,057	395
1965	60	21,072	351
1966	79	30,445	385
1967	94	36,745	391
1968	127	53,496	421
1969	165	75,543	458
1970	213	104,540	491
1971	285	144,307	506
1972	336	181,764	541
1973	452	262,786	581
1974	454	250,265	551
1975	438	245,845	561
1976	487	277,588	570
1977	561	336,814	600
1978	597	360,638	604
1979	665	403,568	607
1980	721	431,498	599
1981	717	437,576	610
1982	697	431,164	619
1983	761	466,552	613
1984	813	509,573	627
1985	1,159	773,670	668
1986	916	628,896	687
1987	1,065	775,445	728
1988	1,159	898,178	775
1989	917	741,759	809
1990	1,404	1,275,538	909
1991	1,346	1,313,573	976
1992	1,204	1,218,397	1,012
1993	1,257	1,368,433	1,089
1994	1,390	1,544,107	1,111
1995	1,719	1,978,746	1,151
1996	1,697	2,068,117	1,219
1997	1,477	1,833,222	1,241
1998	1,847	2,402,749	1,301
1999	1,677	2,335,814	1,393
2000	1,954	2,847,336	1,457
2001	1,980	3,102,376	1,567
2002	1,440	2,301,747	1,598
TOTALS	34,646	\$ 34,613,345	\$ 999

NEW PLAN
RETIRED MEMBERS AND BENEFICIARIES JUNE 30, 2002
TABULATED BY YEAR OF RETIREMENT

Year of Retirement	No.	Monthly Pensions	
		Total	Average
1996	3	\$ 1,558	\$ 519
1997	3	1,526	509
1998	12	7,513	626
1999	16	17,392	1,087
2000	34	35,696	1,050
2001	20	25,559	1,278
2002	20	35,951	1,798
TOTALS	108	\$ 125,194	\$ 1,159

CLOSED PLAN
MONTHLY RETIREMENT ALLOWANCES BY ATTAINED AGE
AS OF JUNE 30, 2002

Attained Ages	Men		Women		Totals	
	No.	Monthly Allowances	No.	Monthly Allowances	No.	Monthly Allowances
UNDER 20	-	-	-	-	-	-
20 - 24	-	-	1	\$ 673	1	\$ 673
25 - 29	-	-	-	-	-	-
30 - 34	-	-	-	-	-	-
35 - 39	1	\$ 345	2	499	3	844
40 - 44	2	1,162	15	5,071	17	6,233
45 - 49	18	9,571	60	27,367	78	36,938
50 - 54	130	85,854	239	146,366	369	232,220
55 - 59	1,281	2,233,646	1,730	2,651,143	3,011	4,884,789
60 - 64	2,462	4,038,636	3,190	4,364,671	5,652	8,403,307
65 - 69	2,742	4,139,594	3,417	4,088,809	6,159	8,228,403
70 - 74	2,589	3,548,291	3,340	3,511,138	5,929	7,059,429
75 - 79	2,187	2,491,761	2,686	2,265,253	4,873	4,757,014
80 - 84	1,345	1,270,495	2,308	1,646,618	3,653	2,917,113
85 - 89	800	681,147	1,863	1,251,999	2,663	1,933,146
90 - 94	433	344,154	1,104	746,978	1,537	1,091,132
95 - 99	181	139,255	390	280,399	571	419,654
Over 100	74	48,038	56	38,567	130	86,605
Totals	14,245	\$ 19,031,949	20,401	\$ 21,025,551	34,646	\$ 40,057,500

NEW PLAN
MONTHLY RETIREMENT ALLOWANCES BY ATTAINED AGE
AS OF JUNE 30, 2002

Attained Ages	Men		Women		Totals	
	No.	Monthly Allowances	No.	Monthly Allowances	No.	Monthly Allowances
UNDER 20	-	-	-	-	-	-
20 - 24	-	-	-	-	-	-
25 - 29	-	-	-	-	-	-
30 - 34	-	-	-	-	-	-
35 - 39	-	-	-	-	-	-
40 - 44	1	\$ 327	-	-	1	327
45 - 49	2	683	-	-	2	683
50 - 54	1	979	3	\$ 1,800	4	2,779
55 - 59	23	38,879	20	28,822	43	67,701
60 - 64	12	24,361	21	25,485	33	49,846
65 - 69	8	7,379	9	4,635	17	12,014
70 - 74	3	1,312	4	1,716	7	3,028
75 - 79	1	2,144	-	-	1	2,144
80 - 84	-	-	-	-	-	-
85 - 89	-	-	-	-	-	-
90 - 94	-	-	-	-	-	-
95 - 99	-	-	-	-	-	-
Over 100	-	-	-	-	-	-
Totals	51	\$ 76,064	57	\$ 62,458	108	\$ 138,522

**CLOSED PLAN INACTIVE VESTED MEMBERS
AS OF JUNE 30, 2002
BY ATTAINED AGE AND YEARS OF SERVICE**

Attained Age	Years of Service to Valuation Date							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
30-34			21					21
35-39			213	17	1			231
40-44			263	108	8			379
45-49			315	179	119	19	1	633
50-54			466	290	207	188	50	1,201
55-59			388	288	182	130	92	1,080
60			67	41	27	12	8	155
61			42	37	21	7	8	115
62			44	21	14	9	2	90
63			53	23	10	5	4	95
64			51	12	6	5	4	78
65			51	11	7	11	2	82
66			14	12	8	2	3	39
67			15	7	4	4	4	34
68			16	7	5	1	4	33
69			15	5	3	4	2	29
70			8	11	9	4	3	35
71			15	9	5	2	4	35
72			7	10	8	4	3	32
73			6	6	5	1	7	25
74			4	6	9	3	5	27
75			10	6	9	5	5	35
76			12	8	6	6	1	33
77			10	9	6	8	6	39
78			10	5	7	5	3	30
79 & Over			50	34	29	16	42	171
Totals	-	-	2,166	1,162	715	451	263	4,757

**NEW PLAN INACTIVE VESTED MEMBERS
AS OF JUNE 30, 2002
BY ATTAINED AGE AND YEARS OF SERVICE**

Attained Age	Years of Service to Valuation Date							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
25-29			2					2
30-34			13					13
35-39			59	3				62
40-44			50	14	3			67
45-49			56	31	17	2		106
50-54			74	46	32	14	4	170
55-59			48	26	14	9	6	103
60			3	4		1		8
61			8	3	1	1	1	14
62						1		1
63			6			1		7
64			5		1			6
65			1					1
67			1					1
75							1	1
Totals	-	-	326	127	68	29	12	562

**CLOSED PLAN ACTIVE MEMBERS
AS OF JUNE 30, 2002
BY ATTAINED AGE AND YEARS OF SERVICE**

Attained Age	Years of Service to Valuation Date							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
20-24	76							76
25-29	356	137						493
30-34	172	1,728	695	1				2,596
35-39	106	635	2,020	865	1			3,627
40-44	115	462	1,092	2,632	762	5		5,068
45-49	91	535	1,163	1,435	3,256	1,981	5	8,466
50-54	96	474	1,212	1,704	1,897	5,240	2,846	13,469
55-59	39	206	579	1,060	1,144	1,667	5,072	9,767
60	7	22	63	113	133	167	605	1,110
61	2	16	40	73	96	114	474	815
62	7	18	17	49	65	72	377	605
63	4	9	16	32	47	54	243	405
64	3	8	9	21	33	43	187	304
65	2	4	12	15	15	19	134	201
66	3	7	2	14	10	21	70	127
67	4	2	5	7	8	9	52	87
68	5	5	5	2	7	11	47	82
69	1	1	3	3	3	6	37	54
70	2	1	2	1	4	1	22	33
71	1	5	3	1	1	2	22	35
72	1	1	1			2	10	15
73	1	1		1	2	1	9	15
74		4				2	9	15
75			2			1	7	10
76		1		1	1	1	7	11
77	1	1			1	1	5	9
78	1					3		4
79	1	1		1	3	3	2	11
Totals	1,097	4,284	6,941	8,031	7,489	9,426	10,242	47,510

NEW PLAN ACTIVE MEMBERS AS OF JUNE 30, 2002
BY ATTAINED AGE AND YEARS OF SERVICE

Attained Age	Years of Service to Valuation Date							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
20-24	1,745	2						1,747
25-29	6,124	1,461	1					7,586
30-34	2,216	2,884	218	1				5,319
35-39	1,273	1,022	611	145	1			3,052
40-44	1,281	906	352	372	100	3		3,014
45-49	1,059	862	357	231	273	119	1	2,902
50-54	717	664	336	217	168	291	108	2,501
55-59	364	253	154	104	83	88	184	1,230
60	48	23	14	13	8	6	15	127
61	34	15	7	5	9	6	12	88
62	25	14	8	3	7	6	12	75
63	27	3	9	2	1	1	6	49
64	9	10	5	3			3	30
65	11	9	2	4	1	1	1	29
66	18	4		1		3	1	27
67	15		1	1	1	1		19
68	11	2	1		1		2	17
69	6	2		2				10
70	9	6						15
71	1					1		2
72	8	1	1			1		11
73	6		1					7
74	2	2						4
75	2	1					1	4
76		1						1
77	1			1	1			3
79	1	3						4
Totals	15,013	8,150	2,078	1,105	654	527	346	27,873

SECTION G

Disclosures Required by
GASB Statements No. 25 and No. 27

GASB STATEMENTS NO. 25 AND NO. 27
REQUIRED SUPPLEMENTARY INFORMATION

Under the Governmental Accounting Standards Board (GASB) Statements No. 25 and No. 27, certain information about the plan is required to be disclosed. The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated.

Additional information as of the latest actuarial valuation follows:

Valuation date	June 30, 2002
Actuarial Cost Method	Entry Age Actuarial Cost Method
Amortization method	Level Percent of Pay Closed
Amortization period	37 Years
Asset valuation method	4-year smoothed market value with corridor
Actuarial assumptions:	
Investment rate of return	7.50%
Projected salary increases*	5.5%-10.6%
*Includes wage inflation at	5.50%
Cost-of-living adjustments	Unscheduled, periodic increases

Membership of the plan consisted of the following at June 30, 2002, the date of the latest actuarial valuation:

	<u>Closed Plan</u>	<u>New Plan</u>	<u>Totals</u>
Retired members and beneficiaries receiving benefits	34,646	108	34,754
Terminated plan members entitled to but not yet receiving benefits			
Vested	4,757	562	5,319
Non-Vested	11,314	17,529	28,843
Active plan members	47,510	27,873	75,383
Totals	98,227	46,072	144,299

**GASB STATEMENTS NO. 25 AND NO. 27
REQUIRED SUPPLEMENTARY INFORMATION**

Closed Plan

Actuarial Valuation Date June 30	Actuarial Value of Assets (a)	Schedule of Funding Progress				UAAAL as a % of Covered Payroll [(b) - (a)] / (c)
		Actuarial Liability (AAL) -- Entry-Age -- (b)	Unfunded AAL (UAAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	
1992*	\$2,376,039,915	\$ 7,949,159,660	\$5,573,119,745	29.9 %	\$2,416,262,885	230.7 %
1993	2,592,320,494	8,508,035,949	5,915,715,455	30.5	2,536,164,646	233.3
1994	2,808,649,929	9,087,583,424	6,278,933,495	30.9	2,614,914,517	240.1
1995	2,983,579,054	9,674,536,606	6,690,957,552	30.8	2,728,810,964	245.2
1996	3,242,032,156	10,283,174,065	7,041,141,909	31.5	2,805,823,234	250.9
1997*	3,678,102,810	10,868,423,166	7,190,320,356	33.8	2,739,435,972	262.5
1998	4,130,388,693	11,481,766,668	7,351,377,975	36.0	2,699,182,719	272.4
1999	4,730,666,420	12,172,501,450	7,441,835,030	38.9	2,755,489,026	270.1
2000	5,209,889,286	12,409,275,218	7,199,385,932	42.0	2,561,532,743	281.1
2001	5,363,497,813	12,695,787,691	7,332,289,878	42.2	2,564,451,154	285.9
2002	5,555,352,257	13,497,778,031	7,942,425,774	41.2	2,604,955,746	304.9

* Revised benefits and/or actuarial assumptions and/or methods.

Schedule of Employer Contributions

Fiscal Year	Valuation Date June 30	Contribution Rates		Annual Required Contribution	Percentage Contributed
		as Percents of Valuation	Payroll		
1993-1994	1992	16.32%		\$416,022,498	59.0%
1994-1995	1993	16.31		436,399,180	61.0
1995-1996	1994	16.56		456,846,570	63.0
1996-1997	1995	16.74		481,927,124	65.0
1997-1998	1996	16.96		502,040,298	N/A
1998-1999	1997	16.77		484,670,600	N/A
1999-2000	1998	17.10		486,946,058	N/A
2000-2001	1999	17.02		494,778,365	N/A
2001-2002	2000	17.55		474,274,191	N/A
2002-2003	2001	17.85		496,033,881	N/A
2003-2004	2002	18.36		532,326,328	N/A

GASB STATEMENTS NO. 25 AND NO. 27
REQUIRED SUPPLEMENTARY INFORMATION

New Plan

Actuarial Valuation Date June 30	Schedule of Funding Progress					UAAL as a % of Covered Payroll
	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) -- Entry-Age -- (b)	Unfunded AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	[(b) - (a)] / (c)
1996	\$ 20,587,223	\$ 47,614,251	\$ 27,027,028	43.2%	\$ 72,506,252	37.3%
1997	72,035,629	176,236,990	104,201,361	40.9	245,167,941	42.5
1998	135,923,370	298,407,427	162,484,057	45.5	395,757,887	41.1
1999	240,053,914	498,422,993	258,369,079	48.2	538,837,104	48.0
2000	368,157,499	705,790,225	337,632,726	52.2	631,071,749	53.5
2001	447,261,751	828,038,282	380,776,531	54.0	754,425,873	50.5
2002	621,222,272	1,166,883,205	545,660,933	53.2	1,004,514,690	54.3

Schedule of Employer Contributions

Fiscal Year	Valuation Date June 30	Contribution Rates as Percents of Valuation Payroll	Annual Required Contribution	Percentage Contributed
1997-1998	1996	9.02%	\$ 6,899,767	N/A
1998-1999	1997	9.12	23,589,079	N/A
1999-2000	1998	9.07	37,869,479	N/A
2000-2001	1999	9.28	52,754,308	N/A
2001-2002	2000	9.54	63,515,478	N/A
2002-2003	2001	9.32	76,192,316	N/A
2003-2004	2002	9.50	106,214,746	N/A

GASB STATEMENTS NO. 25 AND NO. 27
STATEMENT OF CHANGES IN PLAN NET ASSETS, 2001-2002

Net Assets at Beginning of Year	\$ 5,810,759,564
Additions	
Contributions	
Member Contributions	\$ 107,051,946
Employer Contributions	541,082,604
Employer Contributions - Pension Stabilization	30,000,000
Total Contributions	\$ 678,134,550
Investments	
Net Appreciation (Depreciation) in Fair Value	\$ (383,396,789)
Interest Income	215,666,179
Dividend Income	19,924,600
Securities Lending Income	13,817,498
Less Investment Expense	
Investment Fees	(12,090,707)
Securities Lending Fees	(12,240,479)
Net Investment Income	\$ (158,319,698)
Other Additions	
Transfers From Other Retirement Funds	\$ 1,253,717
Annuity and Disability Refunds	1,287,032
Outdated Benefit Checks	864,581
Reimbursement of Administrative Expense	1,931
Total Other Additions	\$ 3,407,261
Total Additions	\$ 523,222,113
Deductions	
Annuity and Disability Benefits	\$ 594,717,533
Voluntary and Death Withdrawals	6,449,874
Claims on Outdated Benefit Checks	777,953
Administrative Expenses	6,780,919
Capital Projects	1,238,838
Depreciation Expenses	12,745
Transfers to Other Retirement Funds	1,250,635
Total Deductions	\$ 611,228,497
Change in Net Assets Held in Trust for Pension Benefits	\$ (88,006,384)
Net Assets at End of Year	\$ 5,722,753,180

GASB STATEMENTS NO. 25 AND NO. 27
STATEMENT OF PLAN NET ASSETS, JUNE 30, 2002

Assets	
Cash and Cash Equivalents	\$ 743,438,282
Securities Lending Collateral	\$ 553,452,342
Receivables	
Employer Contributions	\$ 27,981,632
Due from PERF	4,217,073
Member Contributions	28,270,489
Due from Lottery Commission	7,500,000
Securities Sold	166,877,930
Investments Interest	37,308,246
Total Receivables	\$ 272,155,370
Investments	
U.S. Treasury and Agency Obligations	\$ 1,555,781,310
Corporate Bonds and Notes	1,446,005,967
Foreign Bonds	12,718,800
Equity Securities	2,251,031,816
Real Estate	260,000
Total Investments	\$ 5,265,797,893
Furniture and Equipment	46,086
Insurance Premium Paid in Advance	27
Total Assets	\$ 6,834,890,000
Liabilities	
Accrued Benefits Payable	\$ 3,243,947
Accrued Salaries Payable	131,433
Accrued Liability for Compensated Absences - Current	119,816
Accounts Payable	4,137,451
Due to PERF	6,460,896
Securities Lending Collateral	553,452,342
Payables for Securities Purchased	544,492,904
Total Current Liabilities	\$ 1,112,038,789
Accrued Liability for Compensated Absences - Long-Term	98,031
Total Liabilities	\$ 1,112,136,820
Net Assets Held in Trust for Pension Benefits	\$ 5,722,753,180

SECTION H

Actuarial Assumptions,
Methods and Definitions

SUMMARY OF ASSUMPTIONS AND METHODS USED FOR ISTRF ACTUARIAL VALUATION

The assumptions used in this valuation were adopted for the June 30, 1998 valuation following a study of experience covering the period July 1, 1991 through June 30, 1996.

The investment return rate used in making the valuations was 7.5% per year, compounded annually (net after administrative expenses). Considering other financial assumptions, the 7.5% investment return rate translates to an assumed real rate of return of 2% over across-the-board salary increases and 2.5% over inflation.

Pay increase assumptions for individual active members are shown based on service on page H-8. Part of the assumption for each age is for a merit and/or seniority increase, 5.0% recognizes inflation and 0.5% recognizes other factors.

Total active member payroll is assumed to increase 5.5% annually, which is the portion of the individual pay increase assumptions attributable to inflation and other factors.

The number of active members is assumed to continue at the present number.

The mortality table, for post-retirement mortality and pre-retirement mortality, used in valuing allowances to be paid was the 1983 Group Annuity Mortality Male Table set back 3 years for men and 7 years for women. Related values are shown on pages H-3 and H-4. Disabled post-retirement mortality used was the 1983 Group Annuity Male Mortality Table, set forward 7 years for men and 3 years for women.

Probabilities of retirement are shown on page H-5.

The probabilities of withdrawal are shown for sample ages on page H-6.

The probabilities of disability are shown for sample ages on page H-7. All disabilities were assumed to receive “classroom disability” benefits.

The entry age normal actuarial cost method of valuation was used in determining age and service allowance liability and normal cost, and vesting liability and normal cost.

Differences in the past between assumed experience and actual experience (“actuarial gains and losses”) become part of unfunded actuarial accrued liability.

Unfunded actuarial accrued liability is amortized to produce payments (principal and interest) which are level percent-of-payroll contributions.

Employer contribution dollars were assumed to be *paid in equal installments* throughout the employer fiscal year.

Present assets (cash and investments) were valued using the funding value.

The data about persons now covered and about present assets were furnished by the Fund's Administrative Staff. Although examined for general reasonableness, the data was not otherwise audited by the Actuary.

The actuarial valuation computations were made by or under the supervision of a Member of the American Academy of Actuaries (MAAA).

SINGLE LIFE RETIREMENT VALUES

Sample Attained Ages	Present Value of \$1 Monthly for Life		Future Life Expectancy (years)	
	Males	Females	Males	Females
45	\$146.14	\$152.18	35.62	40.38
50	139.61	147.28	30.98	35.62
55	131.61	141.02	26.55	30.98
60	121.67	133.35	22.29	26.55
65	109.41	123.85	18.23	22.29
70	95.63	112.02	14.52	18.23
75	81.23	98.44	11.31	14.52
80	66.68	84.17	8.57	11.31
Ref:	#166sb1xl	#167sb0xl		

Sample Attained Ages	Portion of Age 55 Members Still Alive	
	Males	Females
55	100.00 %	100.00 %
60	96.72	98.05
65	91.87	95.07
70	83.97	90.74
75	71.90	83.77
80	55.64	72.81
85	36.28	57.78

POST-RETIREMENT MORTALITY

Age	Regular		Disabled		Age	Regular		Disabled	
	Male	Female	Male	Female		Male	Female	Male	Female
21	0.00035	0.00032	0.00054	0.00044	61	0.00772	0.00566	0.02223	0.01387
22	0.00037	0.00033	0.00057	0.00046	62	0.00838	0.00613	0.02482	0.01559
23	0.00038	0.00033	0.00061	0.00049	63	0.00916	0.00662	0.02753	0.01758
24	0.00039	0.00034	0.00065	0.00052	64	0.01006	0.00714	0.03035	0.01980
25	0.00041	0.00035	0.00069	0.00054	65	0.01113	0.00772	0.03337	0.02223
26	0.00042	0.00037	0.00073	0.00057	66	0.01239	0.00838	0.03668	0.02482
27	0.00044	0.00038	0.00078	0.00061	67	0.01387	0.00916	0.04039	0.02753
28	0.00046	0.00039	0.00086	0.00065	68	0.01559	0.01006	0.04460	0.03035
29	0.00049	0.00041	0.00091	0.00069	69	0.01758	0.01113	0.04939	0.03337
30	0.00051	0.00042	0.00097	0.00073	70	0.01980	0.01239	0.05476	0.03668
31	0.00054	0.00044	0.00104	0.00078	71	0.02223	0.01387	0.06068	0.04039
32	0.00057	0.00046	0.00113	0.00086	72	0.02482	0.01559	0.06713	0.04460
33	0.00061	0.00049	0.00124	0.00091	73	0.02753	0.01758	0.07407	0.04939
34	0.00065	0.00052	0.00137	0.00097	74	0.03035	0.01980	0.08148	0.05476
35	0.00069	0.00054	0.00153	0.00104	75	0.03337	0.02223	0.08932	0.06068
36	0.00073	0.00057	0.00172	0.00113	76	0.03668	0.02482	0.09753	0.06713
37	0.00078	0.00061	0.00193	0.00124	77	0.04039	0.02753	0.10605	0.07407
38	0.00086	0.00065	0.00218	0.00137	78	0.04460	0.03035	0.11484	0.08148
39	0.00091	0.00069	0.00247	0.00153	79	0.04939	0.03337	0.12417	0.08932
40	0.00097	0.00073	0.00279	0.00172	80	0.05476	0.03668	0.13387	0.09753
41	0.00104	0.00078	0.00314	0.00193	81	0.06068	0.04039	0.14407	0.10605
42	0.00113	0.00086	0.00351	0.00218	82	0.06713	0.04460	0.15486	0.11484
43	0.00124	0.00091	0.00391	0.00247	83	0.07407	0.04939	0.16631	0.12417
44	0.00137	0.00097	0.00432	0.00279	84	0.08148	0.05476	0.17821	0.13387
45	0.00153	0.00104	0.00476	0.00314	85	0.08932	0.06068	0.19046	0.14407
46	0.00172	0.00113	0.00520	0.00351	86	0.09753	0.06713	0.20301	0.15486
47	0.00193	0.00124	0.00566	0.00391	87	0.10605	0.07407	0.21790	0.16631
48	0.00218	0.00137	0.00613	0.00432	88	0.11484	0.08148	0.23409	0.17821
49	0.00247	0.00153	0.00662	0.00476	89	0.12417	0.08932	0.24844	0.19046
50	0.00279	0.00172	0.00714	0.00520	90	0.13387	0.09753	0.26395	0.20301
51	0.00314	0.00193	0.00772	0.00566	91	0.14407	0.10605	0.28080	0.21790
52	0.00351	0.00218	0.00838	0.00613	92	0.15486	0.11484	0.29915	0.23409
53	0.00391	0.00247	0.00916	0.00662	93	0.16631	0.12417	0.31918	0.24844
54	0.00432	0.00279	0.01006	0.00714	94	0.17821	0.13387	0.34109	0.26395
55	0.00476	0.00314	0.01113	0.00772	95	0.19046	0.14407	0.36505	0.28080
56	0.00520	0.00351	0.01239	0.00838	96	0.20301	0.15486	0.39310	0.29915
57	0.00566	0.00391	0.01387	0.00916	97	0.21790	0.16631	0.42726	0.31918
58	0.00613	0.00432	0.01559	0.01006	98	0.23409	0.17821	0.46953	0.34109
59	0.00662	0.00476	0.01758	0.01113	99	0.24844	0.19046	0.52194	0.36505
60	0.00714	0.00520	0.01980	0.01239	100	0.26395	0.20301	0.58652	0.39310
Ref	#166sb1x1	#167sb0x1	#166sb-9x1	#167sb-10x1		#166sb1x1	#167sb0x1	#166sb-9x1	#167sb-10x1

**PROBABILITIES OF AGE AND SERVICE RETIREMENT
FOR MEMBERS ELIGIBLE TO RETIRE**

Regular Retirement			Rule of 85 Retirement			Early Retirement		
Age	Male	Female	Age	Male	Female	Age	Male	Female
						50	0.0050	0.0050
						51	0.0050	0.0050
						52	0.0050	0.0050
						53	0.0050	0.0050
						54	0.0200	0.0200
			55	0.1100	0.1100	55	0.0200	0.0200
			56	0.1000	0.1100	56	0.0200	0.0400
			57	0.1000	0.1200	57	0.0300	0.0400
			58	0.1200	0.1200	58	0.0300	0.0500
			59	0.1500	0.1600	59	0.0400	0.0500
60	0.1500	0.1500	60	0.1500	0.1500			
61	0.2000	0.1500	61	0.2000	0.1500			
62	0.3000	0.2000	62	0.3000	0.2000			
63	0.3000	0.2000	63	0.3000	0.2000			
64	0.3000	0.2000	64	0.3000	0.2000			
65	0.4000	0.3500	65	0.4000	0.3500			
66	0.4000	0.2500	66	0.4000	0.2500			
67	0.3000	0.2500	67	0.3000	0.2500			
68	0.2500	0.3000	68	0.2500	0.3000			
69	0.2000	0.3000	69	0.2000	0.3000			
70	1.0000	1.0000	70	1.0000	1.0000			
Ref	731	732		733	734		735	736

**WITHDRAWAL RATES
PRIOR TO ELIGIBILITY FOR RETIREMENT**

Years of Service	Service Based	
	Male	Female
0-1	0.2000	0.2000
1-2	0.1500	0.1600
2-3	0.1100	0.1200
3-4	0.1000	0.1100
4-5	0.0900	0.1000
Ref	120	121

Attained Age	Age Based	
	Male	Female
25	0.0830	0.0950
26	0.0830	0.0950
27	0.0810	0.0950
28	0.0720	0.0880
29	0.0630	0.0800
30	0.0540	0.0720
31	0.0460	0.0650
32	0.0380	0.0580
33	0.0360	0.0520
34	0.0320	0.0480
35	0.0290	0.0430
36	0.0260	0.0380
37	0.0230	0.0340
38	0.0210	0.0310
39	0.0190	0.0290
40	0.0180	0.0260
41	0.0170	0.0240
42	0.0160	0.0220
43	0.0160	0.0210
44	0.0160	0.0200
45	0.0150	0.0200
46	0.0150	0.0200
47	0.0150	0.0200
48	0.0150	0.0200
49	0.0150	0.0200
50	0.0150	0.0200
51	0.0140	0.0200
52	0.0140	0.0200
53	0.0140	0.0200
54	0.0140	0.0190
55	0.0130	0.0180
56	0.0130	0.0160
57	0.0120	0.0140
58	0.0120	0.0140
59	0.0120	0.0140
60	0.0120	0.0140
Ref	#202x1	#203x1

**DISABILITY RATES
PRIOR TO ELIGIBILITY FOR RETIREMENT**

Attained Age	Age Based	
	Male	Female
20	0.0006	0.0005
21	0.0006	0.0005
22	0.0006	0.0005
23	0.0006	0.0005
24	0.0006	0.0005
25	0.0006	0.0005
26	0.0006	0.0005
27	0.0006	0.0005
28	0.0006	0.0005
29	0.0005	0.0004
30	0.0005	0.0004
31	0.0005	0.0004
32	0.0004	0.0003
33	0.0004	0.0004
34	0.0005	0.0004
35	0.0005	0.0004
36	0.0005	0.0004
37	0.0005	0.0004
38	0.0006	0.0005
39	0.0008	0.0006
40	0.0009	0.0007
41	0.0010	0.0008
42	0.0011	0.0009
43	0.0012	0.0010
44	0.0013	0.0011
45	0.0014	0.0012
46	0.0016	0.0013
47	0.0017	0.0014
48	0.0022	0.0018
49	0.0027	0.0022
50	0.0032	0.0026
51	0.0036	0.0030
52	0.0041	0.0034
53	0.0045	0.0038
54	0.0049	0.0041
55	0.0053	0.0044
56	0.0056	0.0047
57	0.0060	0.0050
58	0.0060	0.0050
59	0.0060	0.0050
60	0.0060	0.0050
Ref	#135x0.6	#135x0.5

PAY INCREASE ASSUMPTIONS FOR AN INDIVIDUAL MEMBER

Years of Service	Salary Increase Assumptions for an Individual Member		
	Merit & Seniority	Base (Economic)	Increase Next Year
1	9.00%	5.50%	14.50%
2	5.50%	5.50%	11.00%
3	3.50%	5.50%	9.00%
4	3.00%	5.50%	8.50%
5	3.00%	5.50%	8.50%
6	3.00%	5.50%	8.50%
7	3.00%	5.50%	8.50%
8	3.00%	5.50%	8.50%
9	3.00%	5.50%	8.50%
10	3.00%	5.50%	8.50%
11	3.00%	5.50%	8.50%
12	2.75%	5.50%	8.25%
13	2.75%	5.50%	8.25%
14	2.75%	5.50%	8.25%
15	2.75%	5.50%	8.25%
16	2.75%	5.50%	8.25%
17	2.50%	5.50%	8.00%
18	2.25%	5.50%	7.75%
19	2.00%	5.50%	7.50%
20	1.75%	5.50%	7.25%
21	1.50%	5.50%	7.00%
22	1.00%	5.50%	6.50%
23	1.00%	5.50%	6.50%
24	1.00%	5.50%	6.50%
25	1.00%	5.50%	6.50%
26	1.50%	5.50%	7.00%
27	1.00%	5.50%	6.50%
28	1.00%	5.50%	6.50%
29	1.00%	5.50%	6.50%
30	1.00%	5.50%	6.50%
31	1.50%	5.50%	7.00%
32	1.00%	5.50%	6.50%
33	1.00%	5.50%	6.50%
34	1.00%	5.50%	6.50%
35	1.00%	5.50%	6.50%
36	2.00%	5.50%	7.50%
37	1.00%	5.50%	6.50%
38	1.00%	5.50%	6.50%
39	1.00%	5.50%	6.50%
40	1.00%	5.50%	6.50%
Ref.	419		

MISCELLANEOUS AND TECHNICAL ASSUMPTIONS

Marriage Assumption:	100% of members are assumed to be married for purposes of valuing death-in-service benefits.
Pay Increase Timing:	Beginning of (fiscal) year. Payroll amounts stated in the valuation data are amounts actually paid during the prior year.
Decrement Timing:	Retirement decrements are assumed to occur at the beginning of the year, other decrements are assumed to occur mid-year.
Eligibility Testing:	Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
Benefit Service:	Exact fractional service is used to determine the amount of benefit payable.
Decrement Relativity:	Decrement rates are used directly from the experience study, without adjustment for multiple decrement table effects.
Other:	Disability and withdrawal decrements do not operate after member reaches retirement eligibility. Only the withdrawal decrement operates during the first 5 years of service.
Miscellaneous Loading Factors:	The calculated normal, early retirement and vested deferred liabilities and normal costs were increased by 2% to account for the inclusion of unused sick leave in the calculation of Average Compensation.

DEFINITIONS OF TECHNICAL TERMS

ACCRUED SERVICE. Service credited under the system which was rendered before the date of the actuarial valuation.

ACTUARIAL ACCRUED LIABILITY. The difference between the actuarial present value of future benefit payments and the actuarial present value of future normal costs. Also referred to as “accrued liability” or “past service liability.”

ACTUARIAL ASSUMPTIONS. Estimates of expected future experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment return and pay increases. Decrement assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (pay increases and investment return) consist of the underlying rates in an inflation-free environment plus a provision for a long-term average rate of inflation.

ACTUARIAL COST METHOD. A mathematical budgeting procedure for allocating the dollar amount of the “actuarial present value of future benefit payments” between future normal costs and actuarial accrued liabilities. Sometimes referred to as the “actuarial funding method.”

ACTUARIAL EQUIVALENT. One series of payments is said to be actuarially equivalent to another series of payments if the two series have the same actuarial present value.

ACTUARIAL GAIN (LOSS). The difference between actual unfunded actuarial accrued liability and anticipated unfunded actuarial accrued liability -- during the period between two valuation dates. It is a measurement of the difference between actual and expected experience.

ACTUARIAL PRESENT VALUE. The single amount now which is equal to a payment or series of payments in the future. It is determined by discounting future payments at predetermined rates of interest, and by probabilities of payment.

DEFINITIONS OF TECHNICAL TERMS (CONTINUED)

AMORTIZATION. Paying off a present value with periodic payments.

NORMAL COST. The portion of the actuarial present value of future benefits that is assigned to the current year by the actuarial cost method. Sometimes referred to as “current cost.”

UNFUNDED ACTUARIAL ACCRUED LIABILITY. The difference between the actuarial accrued liabilities and the actuarial value of assets. Sometimes referred to as “unfunded past service liability,” or “unfunded accrued liability” or simply as “unfunded liability.”

